

# THE MEDICAL NEWS.

A WEEKLY JOURNAL OF MEDICAL SCIENCE.

VOL. LIX.

SATURDAY, NOVEMBER 28, 1891.

No. 22.

## ORIGINAL ARTICLES.

### CLINICAL REMARKS ON A CASE OF ACUTE MILIARY TUBERCULOSIS.

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Mr. J. E. F., twenty-eight years of age, was admitted to the University Hospital on September 28, 1891. He was a farmer and had enjoyed good health until two years ago, when a horse fell upon him. He was in bed a few days on account of sprains and bruises from this accident, and three weeks subsequently had an irregular febrile attack, which was called "typhoid malaria." Unfortunately, we cannot be sure that this irregular fever was not symptomatic of some local trouble in the chest, resulting from the severe injury. He got better and enjoyed fair health until October, 1890, when, after a spell of influenza, he went back to work, but soon broke down and was not well afterward.

He had a cough all winter, with scarcely any expectoration; he had a sense of weight and of fullness in the left side and occasionally some pain about the lower part of the left chest. In May he had an acute exacerbation of pleuritic trouble, with sharp pain in the left side, and was confined to the house for a month. Almost every day he felt a sense of chilliness, followed by fever, but he rarely sweated. One year ago he weighed 160 pounds, but on admission to the hospital he weighed only 117 pounds.

From the time he was admitted to the hospital, on September 28th, to the date of his death, October 18th, he presented frequent and irregular febrile paroxysms. At intervals of one or two days the temperature would suddenly rise from  $99\frac{1}{2}^{\circ}$  or  $100^{\circ}$  to  $102\frac{1}{2}^{\circ}$ ,  $103^{\circ}$ , or even  $104^{\circ}$ . This rise would occur in a few hours and would soon be followed by an equally abrupt fall, attended with only a moderate amount of sweating. These paroxysms were not at all controlled by large doses of antiperiodics. Repeated careful examination of the chest showed evidences of circumscribed pleural effusion in the lower part of the left chest, posteriorly. Elsewhere, both on the left and right sides, there was ample resonance on percussion, but the respiratory murmur was feeble and the vocal resonance and fremitus seemed less than normal. There were some small crackling râles over the lower lobe of the right lung, posteriorly. There was very little cough, and the only expectoration was a trifling amount of grayish gelatinous mucus. This was repeatedly examined for tubercle bacilli, but with negative results.

I may, indeed, anticipate here by saying that, on the very last day of life, a specimen was obtained

that showed a few bacilli, but, of course, this was too late to be of any guide in diagnosis, as the microscopic results were not obtained until after the autopsy had been made. The heart's action was rapid, weak, and somewhat irregular. The apex-beat was feeble and diffused. There was a soft, systolic murmur over the body of the heart. The urine was normal, the liver was not enlarged, and the spleen was only moderately so.

In explanation of the paroxysmal fever, naturally the first and most hopeful suggestion that occurred was that a circumscribed empyema existed on the left side; but when, on October 3d, I tapped the chest, I obtained twenty-four ounces of clear, deep-reddish fluid that, under the microscope, showed many red blood-corpuscles, a few leucocytes, and small oil globules. Its reaction was slightly acid, the specific gravity 1.016. On boiling, it almost solidified. Careful examination showed no tubercle bacilli.

The occurrence of hemorrhagic effusions in the chest is most frequently encountered in cases of malignant disease of the pleura; it is decidedly rare in tuberculosis. The absence of bacilli is to be specially noted. Of course, the character of this fluid did not help to explain the peculiar paroxysmal fever present. The possibility of ulcerative endocarditis was necessarily taken into consideration. No history could be obtained of cardiac disease, and the murmur present was soft and certainly not of organic nature. It is true that the spleen was somewhat enlarged, but there were no evidences of emboli and the urine was free from albumin or casts.

The patient's strength failed rapidly, the breathing became more and more rapid and shallow, the pulse very rapid and feeble, and death occurred on October 18th. The post-mortem examination revealed complete obliteration of the pericardial sac by old and dense adhesions that, of course, had interfered seriously with the action of the heart. There was no organic disease of the valves, so that it was clear that the murmur heard over the heart had been functional and dependent upon irregular or defective ventricular action. The left chest presented extensive lesions of old pleurisy with dense layers of organized and false membrane that had recently become the seat of milary tubercles. Both lungs presented throughout the most typical lesions of acute disseminated milary tuberculosis. The minute nodules were separate and remained in their recent gray, translucent condition. Everywhere they were separated by alveolar structure. At the lower extremity of the small intestine there was an area of fungous ulceration almost encircling the bowel and extending fully two inches up from the ileo-cecal valve.

It is difficult to say what was the initial lesion in this interesting case. Not improbably it was the pleurisy on the left side, which may have resulted from the accident, and which had been the cause of the irregular fever that was called "typhoid malaria." There had been very little cough, considering the long-standing extensive lesions in the chest, and expectoration was almost entirely absent up to the last. The ulceration of the intestine seems to have caused no diarrhea; there was no history of looseness, and while he was in the hospital the bowels were rather constipated.

There are many impressive lessons to be learned from the case. Not the least important is the extreme caution with which our new and exquisitely delicate means of diagnosis are to be employed. The very fact that one has an instrument of precision disposes to unlimited confidence in its operation. This is right when the observation is made with care, and when it gives positive evidence in the affirmative. It is very different when it gives negative evidence. Thus, had the examination of the sputa shown tubercle bacilli, the diagnosis would have been cleared up at once. There was a temptation to attach too much importance to the repeated failure to detect bacilli. An ophthalmoscopic examination should have been made, but this was overlooked. In not a few cases of acute malarial tuberculosis I have derived great assistance from finding retinal tubercles. This same caution must be observed in the use of many of our new, delicate diagnostic tests. It is eminently true of the chemical examination of the contents of the stomach.

The heart murmur, taken in connection with the enlargement of the spleen and the absence of bacilli from the pleural liquid and from the sputa, raised the interesting question of the possible existence of ulcerative endocarditis. One meets with the same paroxysmal type of fever in this disease, but the heart symptoms are usually more marked than they were in this case, the spleen is larger, evidences of septic embolism are common, and in particular the urine nearly always shows albumin and casts. Everyone knows how obscure are the physical signs in many cases of acute miliary tuberculosis. The lungs will present innumerable minute nodules disseminated throughout their tissue, and yet prior to death there may have been good percussion resonance, absence of râles, and at most a marked feebleness of respiratory murmur, with some impairment of vocal fremitus and resonance. But then, as in this case, the disturbance of breathing is out of all proportion to the demonstrable lesions, and this of itself should excite suspicion. It is true that, in this case, the matter was complicated with the existence of the pleural effusion on the left side and the adherent pericardium. This seemed to go far in explanation

of all the symptoms except the paroxysmal fever. The influence of pericardial adhesion in causing a cardiac murmur without valvular lesion was well illustrated.

Upon the whole, the case seemed a most interesting and instructive one as an illustration of acute tuberculosis, with a great enhancement of the difficulties of diagnosis that often surround that fatal malady. The date at which the rapid tuberculous development took place in this case cannot be determined, but everything indicates that it was quite recent.

#### THE ETIOLOGY OF STOMATITIS APHTHOSA.<sup>1</sup>

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THE term aphthosa, as old as Hippocrates, has caused more confusion than any other in the nomenclature of diseases of the mouth. Even at the present day, so much or so little may be included in the term aphtha that, for the sake of precision in diagnosis, the word should either be entirely dropped or its meaning so clearly defined that there can be no reasonable room left for error. Without going into the subject historically, which I have done elsewhere, it will be well to state here that the apthous form of stomatitis referred to is that disease first defined by Bohn. To Bohn belongs at least the credit of first having published the views of other authors besides himself, which finally culminated in making a precise clinical picture of stomatitis aphthosa. If we could adhere to this, and it seems both feasible and practicable to do so, we would have a definite term for a clearly defined clinical picture. If, on the other hand, any ulceration of the mouth, any small loss of substance in the mucous membrane, is called an aphtha—as has been done and is being done—we shall never arrive at any exact conclusions.

Stomatitis aphthosa is a disease characterized by general and local disturbances—the general disturbance in the form of fever and other constitutional symptoms, the local disturbance as an eruption of aphthæ. The aphthæ (and in this I differ somewhat, though not essentially, from Bohn) are to be looked upon as vesicles modified by the locality in which they appear, *i. e.*, the mouth. They are also changed by the action of moisture, being constantly bathed in saliva from the irritated mouth. When, as is not infrequently the case, the eruption also appears upon the skin around the mouth, there can be no doubt of the nature of the eruption; and if, as I have shown latterly in one case, applications of warm water are kept up constantly, the history of these vesicles will be the same

<sup>1</sup> Read at the meeting of the American Pediatric Society, held in Washington, September, 1891.

as that of those within the mouth. In brief, then, we would call stomatitis aphthosa a vesicular eruption in the mouth, with certain constitutional symptoms.

The cause or the causes of this disease have eluded detection. Without disregarding the opinions of others, there is always one special pet view on this subject. Perhaps the greatest number of authors are agreed in ascribing this disease, like all others, to those glittering generalities that are so well known to all of us in connection with the etiology of children's diseases. The one calls it struma, the other scrofula, the third malnutrition, the fourth tuberculosis, and so on *ad infinitum*. I am not prepared to say that unhealthy children are more predisposed to this disease than healthy ones. Whatever our theoretical views may be regarding the vulnerability of children otherwise affected, my observation has led me to believe that the general condition of a child, so far as we can see, has nothing to do with an attack of stomatitis aphthosa. That there is an individual predisposition, I firmly believe; in what this consists I do not know. Children in the best of health will sometimes have an attack without apparent cause. Teething, as well as everything else, has been accused of producing this trouble. It can hardly be out of place to say that this view is simply based on the *post hoc ergo propter hoc* method of reasoning. If we were to accept everything that follows or accompanies the coming through of teeth as being produced by dentition, we had better close the book, so far as the etiology of disease for the first three years of life is concerned. It can be proved beyond a doubt that aphthæ are not tuberculous, therefore not scrofulous or strumous. There is a rare form of tuberculous stomatitis, so rare that every case ought to be recorded; but, so far as I am able to learn, it has nothing in common with the trouble we are now discussing. It is quite certain that no evidences of tuberculosis have been found in all the bacteriological investigations made by others, as well as by myself. As usual, "catching cold" has been charged with the cause of this disease. So little that is positive can be said in this direction that the less we say the better.

After these general causes are disposed of, the most common belief is probably that aphthæ are always due to a deranged stomach. This is a very natural view, because, as a rule, aphthæ are associated with some derangement of the alimentary canal. The routine practice is about as follows: ulcers in the mouth—positive indication for rhubarb, calomel or hydrargyrum cum creta. A careful examination of each individual case will prove that the child was ill before the sore mouth came on—that, as it were, the gastro-intestinal symptoms represented a sort of period of invasion for the disease. No one would for a moment believe that the eruption of scarlatina

comes from a deranged stomach, although of all diseases it is most frequently preceded by vomiting. Errors of diet are so common in childhood that it is almost impossible to exclude them in searching for the causes of disease. I have seen three children in the same family have an attack of aphthous stomatitis: in the older two, errors of diet could be taken into consideration; in the third, as he had taken nothing but sterilized milk, this was impossible.

Yet we are constantly confronted with the statement that the child's stomach has been deranged for the last few days, and that now the ulcers have appeared there certainly must be some connection between the two. It is almost impossible to conceive of the mucous membrane of the mouth being affected by continuity from that of the stomach; the nervous connection is a very remote one; but the clinical fact remains as already stated. If the alimentary canal is primarily the cause of the trouble there is but one explanation, and that is that a something is excreted by the saliva that causes these ulcers to be formed. But, for various reasons, the mechanism is not so simple for aphthæ; it might be given as an explanation of the existence of those small follicular ulcers so common with some patients, and would possibly be satisfactory; in aphthous sore mouth there is another factor that seems absolutely essential.

For the last ten years the view has been gaining ground that stomatitis aphthosa is the manifestation of the foot-and-mouth disease in cattle. This view was first brought forward by Sagar in 1764 and has been corroborated by many observers in various parts of Europe. (See Bollinger: *Ziemssen*, vol. iii, p. 581.) Hertwig (1834) was the first to prove the connection by direct experimentation; he and three other physicians drank infected milk, and all three were attacked by stomatitis aphthosa; in Hertwig's case the eruption also appeared upon the hands and feet. These results were verified by Jacob in 1846. On the other hand, a great many authors, of whom Cnyrim is the last, have had occasion to give their evidence on the other side of the question. It must be confessed that the number of observers who have been able to verify this connection is steadily increasing, and that the view itself is being more generally accepted. This would place the affection in the class of infectious diseases. Admitting that this view is correct for Europe, according to my information from veterinary surgeons and their literature it could not be true for this country. Foot-and-mouth disease is an exceedingly rare disease in this country—indeed, it is claimed by some that no well-authenticated case is on record. From the report of the United States Treasury Cattle Commission, 1883 (*Amer. Vet. Rev.*, vol. vii), I learn that an invasion



of foot-and-mouth disease swept over northern New York and New England in 1871. In 1883 diseased cattle were landed in New York by two ships (the "France" and the "Nessmore") employed to carry cattle, and the cargo, which was returned to the other side, became infected on board, as the period of incubation seems to be only thirty-six hours. This and other previous experiences (see a long correspondence, *Report Department of Agriculture*, "Diseases of Animals," Washington, 1881) gave rise to the idea, held in Europe, that the foot-and-mouth disease may originate in this country. In 1884 Dr. A. A. Holcombe (*Vet. Review*, vol. viii) reported an epidemic in Kansas, but ill-effects in human beings are not mentioned. In the same year Geo. H. Bailey, D. V. S., reported an epidemic in Portland, Maine, brought in by Hereford cattle. These are the only records of epidemics in this country that I have been able to find; it is claimed by veterinary surgeons that no case has ever originated in this country, and by some, as has been stated, that no well-authenticated case is on record.

However this may be, I have taken the trouble in every instance to look into the milk-supply, and have questioned the surgeon in attendance at the dairies from which the milk-supply has been obtained, always receiving the answer that there never had been a case of foot-and-mouth disease in Cincinnati. Infection would be the most rational explanation for the causation of the disease, and in order to determine whether there could be a contagium vivum, I have had the aphthæ examined bacteriologically, all precautions being observed and all the various methods being employed. The result, when positive, was to show the presence of pus-producers, and of nothing more.

Dr. Eugene Fränkel (*Virch. Archiv*, Bd. cxiii, 111) describes the process as a pseudo-diphtheritic one (Weigert), practically agreeing with Baginsky (1884), who found microorganisms, cocci, and a few bacilli. Fränkel examined three cases bacteriologically, in two of which he found the staphylococcus pyogenes citreus (Passet), and in the other the staphylococcus pyogenes flavus (Rosenbach). He hastens to the conclusion that these organisms are the cause of the disease, although he has never succeeded in producing any lesions by inoculation in lower animals, thus disregarding one of the most important evidences as to the pathogenic nature of an organism.

If we accept the view of the causal relation of foot-and-mouth disease and stomatitis aphthosa, and if we reject such a connection for this country, we are left the choice of two conclusions: either we do not have stomatitis aphthosa, or the disease may be produced by more than one cause.

In regard to the first assumption—the non-existence of the disease in this country—I believe every-

one will agree that we see as well-defined cases here as can be seen anywhere in Europe. I am sure that I have seen as well-marked aphthæ in my own clinic as I have abroad. The variety of the low forms of life found shows, either that we have not found the pathogenic form, or that their invasion is a secondary process, due to the existence of a soil made fertile by the aphthous process. In foot-and-mouth disease any abraded surface may become affected, so that both a local as well as a general infection must be accepted; whether both causes be the same cannot be proved at present. Cases are on record in the human being, in which, upon the drinking of infected milk, the eruption also appeared upon the hands (Hertwig). In these cases the eruption must certainly have been due to general and not local infection. In the absence of pathogenic forms, we must look for some chemical agent that can be carried into the circulation, producing an eruption upon the mucous membrane as well as upon the skin. Purely theoretical as this may seem, it has been accepted by dermatologists for many skin diseases (eczema, herpes), and only awaits conclusive proof in the isolation of these bodies, which will become possible with the further advances in animal chemistry.

Now, taking for granted that a chemical body, formed in foot-and-mouth disease in cows, carried by the milk, produces stomatitis aphthosa in the human being; that we have stomatitis aphthosa in the absence of this foot-and-mouth disease, the inevitable conclusion must be that more than one cause can be found for this disease. Possibly, when bacteriological methods will have become still better developed, a lower form of life may be found as the first cause of this disease; but for the present this view seems untenable, especially as it has been proved that inflammation may be caused by other agents than lower forms of life. (Grawitz, Buchner, and others.)

In addition, we must be reminded of the fact that aphthæ are frequently associated with other diseases: pneumonia, intermittent fever, gastro-intestinal disturbances, the acute exanthemata, etc., so that the position of multiple causes becomes very much fortified. It seems out of the question to accuse a local cause, although wounds and burns may produce lesions that cannot be distinguished from aphthæ. In this direction, therefore, there seems nothing left but the acceptance of some general causes as indicated. The question would arise: How do these causes produce lesions in the mouth?

It has always seemed to me that aphthæ were nothing more or less than the eruption of herpes. The reasons for this are as follows: If we make an artificial aphtha (Gerhardt, Bohn, and myself) by



any cause that would produce a vesicular eruption upon the skin, the lesion is identical with the one we find in stomatitis aphthosa. In a great many cases of stomatitis aphthosa we find herpes facialis, the eruption being continued from the mucous membrane to the skin; and lastly, the diseases in which herpes occurs most frequently are those in which we commonly find that form of mouth trouble. If we take a vesicle and develop it in the mouth, it will, as has been stated before, undergo the same changes as an aptha. In brief, then, the etiology of stomatitis aphthosa, in the great majority of instances, is to be studied as the etiology of herpes non-parasitica. Dermatologists regard herpes, especially herpes zoster, as a disease of nervous origin (Bärensprung, Kaposi, Sattler, and others); this would include the herpes secondary to other diseases, for no one can claim for the herpes facialis of pneumonia that it is a zoster—occurring, as it usually does, upon both sides of the face in children (Thomas). The same can be said of stomatitis aphthosa. It does not follow the course of any one nerve exactly, although in the majority of instances the eruption will be found along some branch of the fifth pair of nerves, especially the lingual. Verneuil (*Annales de Dermatologie*, 1885) states that herpes may be of traumatic origin. When a nerve is injured the eruption will appear at its peripheral distribution.

In those cases, then, in which we have been able to find the pathological lesion of herpes, it has been found to be some irritative change in the ganglion from which the nerve arises, or in the nerves themselves. Naturally, there must be a something that produces this lesion, and it would not be an unreasonable supposition to look for this something in the form of a body the result of bacterial activity, or of some faulty process in the digestive apparatus. A similar process, not exactly analogous, will be found in diphtheria, in which the Löffler bacillus produces the local manifestations and the toxine the remote ones. If we take the poison of foot-and-mouth disease, this will represent the toxine of diphtheria, already formed, which, absorbed from the intestinal tract, produces the general disturbances, and finally the apthæ, as the result of irritative changes in the nerve-ganglia. This something, called ptomaine by the modern French writers, does not require for its origin the presence of microbes. It may have its origin within the body, as the result of a perverse digestive process within the alimentary canal, the liver, or even during the process of reduction, within the circulation.

Parrott and Erb were the first to have claimed that herpes might be looked upon as an infectious process, and Hardy (1885), Delétang (1886), Landouzy (1883), and Feulard (*Dictionnaire Ency-*

*clopédique des Sciences Médicales*, 1888), have continued the theory, Feulard arriving at the same conclusions that I have here expressed.

Nothing more can be claimed for this view than that it is an hypothesis, with many things necessary to be proved before it can become susceptible of positive proof. The original poison must first become isolated, then detected in the circulation, and, finally, it will have to be proved that this poison is capable of producing apthæ.

But if we grant the connection with foot-and-mouth disease—and at present this conclusion is the result of clinical observation only—it would seem that there is justification for the view already expressed. Although so much is left to be proved before this view can be accepted, we are, nevertheless, justified in expressing it, though purely the result of observations in the various forms of herpes and deductions from these observations.

The last etiological factor is contagiousness. Apthæ will be found in several members of one family at the same time. I have had occasion to observe this in several instances. This is the only evidence that could be brought forward to prove the contagious nature of the disease. It would seem more natural, however, to claim that the same cause had been operating upon these various members of the same family, although the apthæ will not appear on the same day in each individual. The latter fact could be readily explained by taking into consideration the varied susceptibility of individuals, and the quantity or quality of the poison introduced into each of these individuals.

In conclusion, I would sum up the results as follows:

1. Stomatitis aphthosa is a disease produced by some form of deleterious material in the circulation.
2. This material may have its origin in various processes, bacterial or otherwise.
3. It may, therefore, be of various kinds.
4. This material acts upon a nerve or nerves, or upon a nerve-center or nerve-centers.
5. It produces an herpetic eruption that is the apthous process.

#### PARALYSIS FOLLOWING MEASLES.

*Based Upon Forty-one Cases.*

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THE influence of acute febrile diseases in the production of palsies did not escape the observation of some very early writers. Anyone that feels an interest in the historical aspect of the subject will be amply rewarded by consulting the series of remark-

able articles by Imbert-Gourbeyre.<sup>1</sup> James Lucas,<sup>2</sup> however, was the first, so far as I have been able to discover, to report, in sufficient detail to make it of use clinically, a case of paralysis following measles. The patient was a woman, twenty-three years old, and the palsy a paraplegia. An interesting fact connected with this case is that nine years previously the patient had developed the same symptoms following an attack of variola.

All writers on the subject are agreed in declaring that paralysis as a sequel of measles is very rare. Thus, Parrot told Landouzy<sup>3</sup> that he had never seen a single case, though for ten years he had had the opportunity of making observations in a hospital in which measles reigned *en permanence*. In Wallenberg's<sup>4</sup> series of 160 cases of cerebral palsy, 9 are said to have followed measles; but the number should be 8, for Bourneville's case is recorded twice (Cases XXIX and XXXII). Gowers has met with 7 cases, Rilliet and Barthez have reported 1, and Osler<sup>5</sup> and John Abercrombie<sup>6</sup> each 4. Altogether I have been able to find only 41 cases, one of which I observed myself.

Spinal palsies, as a rule, are much more frequent among children than are cerebral palsies. During a period of time in which 120 cases of the latter visited the Infirmary for Nervous Diseases in this city, there were nearly 500 of the former (Osler). But the large majority (about 35) of the cases of palsy following measles collected by the writer have been cerebral. This preponderance of cerebral over spinal cases may be more apparent than real—that is to say, it may simply have been my fortune, though I think not, to find more of the former than of the latter.

The clinical differences between cerebral and spinal palsies are well marked. In the former there is paralysis with spasmodic movements; the reflexes are exaggerated, but the electrical reactions remain normal, and wasting does not develop quickly or attain an extreme degree. In spinal palsies, on the contrary, the palsy is associated with rapid wasting, the reflexes are soon lost, and marked changes in the electrical reactions occur, while rigidity is absent.

The forty-one cases collected furnish sufficient data for a study of infantile palsy following measles.

The onset of the disease is abrupt. It is generally marked by a convulsion, or by a derangement of consciousness varying from simple drowsiness to coma. The latter appears to have been the mode of origin in my own case. There may be a

single convulsive seizure or a series of seizures. In Bernhardt's<sup>7</sup> case convulsions occurred nearly every eight days for three months. In Bourneville's<sup>8</sup> case the initial attack of convulsions lasted seven hours, and the convulsions recurred two months later. Sometimes the convulsions are at first general, while the extremities of the affected side are rigid and contracted. This was the condition in Bateman's<sup>9</sup> case—the left side was paralyzed, and in the intervals of the convulsions the right extremities were in continual motion.

In a number of cases the disease develops without convulsions, or with convulsions so slight that they have entirely escaped observation. My own case is an example of this, and for convenience will be reported here.

A boy, thirteen months old, developed measles of moderate severity about May 13 or 14, 1890. As the eruption faded, catarrhal pneumonia manifested itself. When convalescent from the latter, on May 30th, between three and five o'clock in the morning, it was discovered that he was paralyzed on the left side. There had been no palsy during the preceding afternoon and evening, for he had been able to move both arm and leg perfectly. When seen on the following morning, the child was in a condition of partial stupor, and was turned partly toward the right side. The right eyelid could not be opened voluntarily. The pupils were contracted. The left arm and leg were flaccid and motionless; when raised they dropped like lead. The left foot was rotated outward and rested on its external border; the toe was pointed and the heel elevated. There was anesthesia of the affected side. When the features were wrinkled, the left side of the face remained motionless. There was slight elevation of temperature; the pulse was irregular in rhythm; the breathing was Cheyne-Stokes in character, but not noisy.

By the first of June, some contracture of the left fingers was noted, with beginning return of power. The child had begun to suck, the pulse improved, but the breathing remained much as it had been. From this time on, power slowly returned in arm and leg, but the contractures persisted, and the face continued paralyzed. At the present writing (November, 1891), the child shows considerable improvement, most marked in the facial palsy. There is increased power in both arm and leg, and absence of contractures. The nutrition of the child is in excellent condition, but it has an insatiable appetite, and its mental condition is not encouraging. Speech is much affected, the child being very slow in acquiring words, and articulation being poor.

In Scheper's<sup>4</sup> case, the onset was marked by coma, which persisted nearly for three days. When this dis-

<sup>1</sup> Gazette Médicale de Paris, 1863, No. 26.

<sup>2</sup> Lond. Med. Journ., 1790.

<sup>3</sup> Des Paral. dans les Mal. Aiguës. Thèse, Paris, 1880.

<sup>4</sup> Jahrbuch für Kinderheilkunde, 1886, xxiv, 384-439.

<sup>5</sup> Cerebral Palsies in Children.

<sup>6</sup> Brit. Med. Journ., 1887, vol. i, 1323.

<sup>7</sup> Virchow's Archiv, 1885, cii, 26-80.

<sup>8</sup> Comptes rendus de la Soc. de Biol., 1876, 163.

<sup>9</sup> Edinburgh Med. Journ., 1805.

<sup>4</sup> Berliner klin. Wochenschrift, 1872, 517.

appeared, the child (eight years old) was unable to speak. The sensorium was intact, and replies to questions were made by movements of the head. The child was unable to stand, but could move the limbs. Coördinated movements were impaired: the child could not take a cup directly to its mouth, but would carry it to the brow. In this case recovery was remarkably rapid—paresis rather than palsy existing. In fifteen days the patient began to talk, the voice being nasal and high-pitched; it could then also stand and take things better—improved coördination.

In Baxter's<sup>1</sup> case the onset was accompanied by delirium. Slight palsy was just perceptible at the height of the disease, but the palsy became more marked as the febrile symptoms abated, so that on the fifth day the child was totally incapable of moving any of the muscles of the right side. The muscles on this side were flabby, insensitive, and of a lower temperature than in health. In this case also recovery was rapid, being complete on the twenty-sixth day. Baxter believed the rapid recovery to be attributable to the administration of *nux vomica*.

Following immediately upon the convulsion or coma, palsy or paresis is detected in the muscles of the affected side, or, in the case of paraplegia, in the affected limbs. At first the affected parts are flaccid, and more or less anesthetic. If recovery is very rapid there may be no development of rigidity, with contractures. When the latter develop, sensibility has already become restored.

In cases of palsy of spinal origin, the onset is free from either convulsions or coma. In Perret's<sup>2</sup> case, the patient, after an ordinary attack of measles, believed himself well, when he suddenly perceived considerable feebleness of the lower limbs. For five days he could move his limbs in bed only with much difficulty, and it was absolutely impossible for him to stand erect. At no time was there pain in the affected parts. Retention of urine induced him to enter the hospital, where Perret saw him. Beyond a little pallor he presented the appearance of health. The reflexes were intact and so was sensation. He dragged the feet a little in walking, and they did not feel solid under him. There were no evidences of muscular atrophy. Nothing particular was noted regarding the arms. The patient had to be catheterized regularly, and there was occasional incontinence of feces. Speech was not altered; there was no nystagmus, no appreciable trembling of the head or limbs. Improvement was steady and rapid.

In ascending spinal palsy the onset is more gradual. In Bergeron's<sup>3</sup> case, the patient entered the hospital August 23, 1867. By September 1 the palsy began

to be sharply defined. Muscular contractility in the lower and upper extremities was diminished, swallowing was difficult, the voice nasal. By October 14th, under tonics and electricity, the patient appeared to have improved, but on the next day he was worse and the palsy was ascending. On attempting to swallow, food passed into the trachea. Two days later it is stated that the lungs had lost their normal contractility, and that mucus accumulated in the bronchial tubes and throat. The sphincter ani was paralyzed, the face was pale, the pulse 136, the respiration 52. Death resulted from slow asphyxia.

Liégard<sup>4</sup> was more fortunate with his case. The patient, a boy, two years and three months old, developed measles, after having had an exhausting diarrhea for fifteen days. Between five and six weeks after the attack of measles began, palsy was first noticed by the mother. Nine days later the condition was as follows: In addition to great weakness of the upper and lower extremities, the head fell forward on the chest, from palsy of the muscles of the back of the neck. This symptom was manifest and had been gradually increasing for two days. Deglutition at the same time became more and more difficult; mastication also was interfered with. The skin appeared to be insensitive to puncture and to pinching. Improvement in the condition was gradual and steady. Less than three months after the palsy developed it is stated that the patient was as well as though he had never been sick.

The symptoms in Barlow's case<sup>5</sup> of early disseminated myelitis are interesting. The patient was a man, twenty-three years old. The eruption of measles occurred June 10, 1885, and by June 13th it had begun to fade. There was a slight systolic murmur at the apex; the pulse was 76. The only complaint on the part of the patient was of soreness referred to the sternum, since June 11th. At midnight of June 13th, the man was unable to pass his urine. The temperature rose the next evening to 103.8°, and on the next morning it was 103.2°. The patient was very drowsy, irritable when roused, and speedily again lapsed into drowsiness. The pupils were sluggish, the grasp of the hand was weak, the limbs were immovable, but sensation was preserved. There was no rigidity and no knee-jerk. The systolic murmur already spoken of persisted. The patient retched, but no actual vomiting occurred. On the morning of June 15th there was less drowsiness, but in other respects the man was worse; he could speak only in a whisper; the fixed pain in the breast-bone was still present; the urine was retained; cyanosis gradually developed, and death occurred at 9 P.M., June 15th, five days after the appearance of the eruption of measles.

<sup>1</sup> Med. Repository, New York, vol. viii, 107.

<sup>2</sup> Clin. Méd. de l'Hôtel-Dieu de Lyon, Paris, 1887.

<sup>3</sup> Gaz. des Hôpitaux, 1868, 5.

<sup>4</sup> Gaz. des Hôpitaux, 562, December 3, 1859.

<sup>5</sup> Med. Chirurg. Trans., 1887, lxx, 77.



As regards the type of palsy following measles, the paraplegic is said by Landouzy to predominate; whereas palsy of the velum palati and of the muscles of the neck is peculiar to diphtheria, while in intermittent fever the type is that of right hemiplegia with aphasia. Again, the more or less permanent paraplegias are seen, he says, especially as a sequence of typhoid fever and of dysentery, palsy following scarlet fever being cerebral more often than spinal and peripheral. I cannot confirm or disprove the accuracy of Landouzy's statements as to the other diseases mentioned, but he is wrong so far as measles is concerned. Here the type is certainly cerebral, and most frequently it is hemiplegic.

The paralysis usually appears during convalescence, and most frequently from the latter part of the first week to the close of the third week after the onset of the attack of measles. Of twenty-one cases that are reported in sufficient detail to give the information, eleven developed the symptoms of palsy between the fifth and the sixteenth day, while five more probably belong to this period from the fact that the palsy is said to have occurred "during convalescence" (three times), "on the twelfth day after the disappearance of the eruption" (once), and "at about the time of the disappearance of the eruption" (once). In the remaining cases, three developed convulsions on the second day of the eruption, one a month after the onset of the measles, and one in from five to six weeks.

The duration of the cerebral palsy depends upon the severity of the attack. In six cases it was between sixteen days and eight weeks. Disturbance of speech persists longer than the other evidences of the nervous lesion. In one case there was still such disturbance at the end of nine months, and in another case, aphasia lasted for two years. In Sympton's<sup>1</sup> case, a girl, three and a half years old, developed aphasia and right hemiplegia in connection with an attack of measles, and when thirteen years old speech was still imperfect and there was atrophy of the right extremity. It is evident that in many cases the lesions are permanent, and Bourneville's<sup>2</sup> case, which will be referred to later on, leaves no doubt that the future of the child is clouded by the possibility of epilepsy.

One case of spinal paraplegia (Lucas) is said to have lasted more than a week, and one of atrophic spinal palsy six months. In a case of cerebral paraplegia the duration is set down as from two to three weeks. Barlow's case of disseminated myelitis resulted in death in five days, and a case of ascending spinal palsy recovered in three months. In Bateman's case the patient survived the first attack, the dangerous symptoms subsiding in five

weeks. Subsequently convulsions reappeared, and death ensued three months after the onset of the disease.

Our knowledge of the pathology of infantile palsy is far from complete, but much, nevertheless, has been learned through the careful observations of Gowers, Ross, Osler, Bernhardt, Wallenberg, and others.

So far as birth-palsies are concerned, it is certain that hemorrhage, frequently meningeal, is the cause of the palsy, and that difficult labor in many cases accounts for the hemorrhage. In the palsy following an infectious disease, however, the pathology is more obscure, for the great majority of the patients do not die in the attack, and when death occurs at a more or less remote period the morbid conditions found are secondary to a still unexplained primary pathological process.

Palsy following measles is not a mere coincidence. It is less frequent than palsy following diphtheria and scarlet fever, but it is universally admitted that there is a connection of cause and effect between the two. Strümpell has suggested that the morbid process is an inflammation, an encephalitis of the cortex, similar to that present in anterior poliomyelitis, or infantile spinal palsy. But as the palsy is in a number of cases complete, and yet of transient duration, it is difficult to believe that in these cases there has been inflammation. Encephalitis, nevertheless, should be considered one of the causes, for Barlow has reported one case of disseminated myelitis following measles, the diagnosis having been confirmed by autopsy with careful microscopical examination; and if myelitis can occur, why not encephalitis?

In cases in which organic heart-disease exists, embolism is a possibility. But heart-disease is rarely present, and Osler declares that the ten specimens in the museum of the Elwyn institution constitute evidence against the embolic theory.

The blood transmits the poison of measles to all parts of the system. The eruption is seen upon the fauces before it appears upon the body, and the catarrhal pulmonary symptoms are in all probability due to the presence of the eruption upon the mucous membrane of the respiratory tract. It may be that in carrying the poison the bloodvessels themselves become altered in their structure, so as to permit of extravasations of serum or blood. If the amount be very small and reabsorption be very rapid, we can understand how the palsy may be transient; or it may be that an inflammation of the arteries is set up, as a result of which the blood is withdrawn from certain areas. Osler suggests that a widespread arteritis might initiate a sclerosis, and, if suddenly developed, a porencephalus, and sclerosis and porencephalus are lesions found at autopsies in cases of

<sup>1</sup> Brit. Med. Journ., 1890, vol. i, 283.

<sup>2</sup> Loc. cit.

infantile palsy. Gowers thinks the probable cause of the palsy is thrombosis of the cerebral veins and of the sinuses. While this occurs in infancy, I do not know of a case in which it has been demonstrated by autopsy in infantile palsy.

The fact that most of the cases of palsy following measles occur in about the second week of convalescence seems to indicate that a change has been taking place in the arteries, dating from the active stage of the disease, and that when this arterial change reaches a certain point, we have an apoplexy, a leakage of serum, or an occlusion of a number of arteries from general arteritis. In Barlow's case we may suppose that the specific poison of measles escaped from the bloodvessels, for the disseminated myelitis was present almost, if not quite, from the onset of the disease, which ran its entire course in five days.

From two cases that have come under my observation, I am the more inclined to believe that the poisons of measles and other eruptive fevers tend to destroy the integrity of the bloodvessels. In the first, a young man, twenty-three years of age, with phthisis of the left apex not far advanced, was suddenly seized with most profuse hemorrhage. In the course of forty-eight hours he must have lost two quarts or more of blood. Previously to the hemorrhage he was without fever, was gaining in weight, and stood a good chance of recovery. Considering the condition of the lung, I was at a loss to account for the hemorrhage. Following the latter, the temperature was continuously high, and on the eleventh day a copious eruption of measles appeared. The hemorrhage in this case appears to have marked the beginning of the incubation-period of measles, and the poison of that disease, added to the existing disease of the lung, was sufficient to determine a hemorrhage.

In the second case, a child, four years old, was seized on the third or fourth day of scarlet fever, when the rash was already much faded, with profuse hemorrhage, apparently from the lungs. When I saw the child the next day, no focus of disease in the lung could be discovered. About a year before this time the child had had disease of one lung, which I feared at the time was tuberculous, but it had recovered, and no pulmonary symptoms existed before or during the attack of scarlet fever.

On the other hand, it is possible that the specific poison of measles, bacterial or other, acts by exciting an inflammation in the cells of the motor area of the cerebral cortex, and in the ganglionic cells of the anterior cornua of the cord.

As, in the great majority of cases, the palsy occurs during convalescence, it might be supposed that this was simply a manifestation of profound muscular weakness resulting from an exhausting disease. This

supposition, however, would not be supported by the facts. In most of the cases the attack of measles has been of mild or of only moderate severity, and nothing is said to indicate that the patients were in a depraved state at the time of the attack. In Perret's case, for example, the patient, a robust, very muscular man, became aware of his palsy for the first time when, cured of his measles, he essayed to get out of bed.

While the palsy following measles cannot be ascribed to exhaustion, there is reason to think that special susceptibility to nervous affections is a predisposing cause. In Lucas's case, the patient, on the ninth day of an attack of measles, had paraplegia with incontinence of urine and feces, and she had had precisely the same symptoms nine years before, following an attack of variola. Perret, moreover, is inclined to think that his patient's susceptibility to paralytic influences may have been brought about by his habit of drinking three quarts of wine a day.

The prognosis is good as regards life. In only four of the cases is death said to have occurred. One of these was a case of disseminated myelitis, and one a case of ascending palsy. From this alone it would appear that the spinal palsies are more fatal than the cerebral. But such a conclusion is probably unjustified. Deaths may have occurred later and not have been reported.

The severity of the onset indicates the severity of the lesion, and the rapidity of recovery indicates to a certain extent the degree of ultimate recovery. When the left hemisphere is involved, aphasia may be a symptom. It is usually one of the last symptoms to disappear, and in a modified degree it may be permanent. While the prognosis is good as regards life, yet, when the palsy does not disappear speedily and completely, the possibility of epilepsy and subsequent imbecility must be borne in mind. Epilepsy may be deferred several years. In Bourneville's case, the child had measles when six years old, and epilepsy developed when it was between eight and eleven years old.

Repeated convulsions increase the gravity of the prognosis, both as regards life and as regards recovery of power in the palsied members. It would appear that epilepsy is most likely to occur when convulsions have appeared at an interval, say, of several months from the initial attack.

The treatment of palsy following measles is naturally divided into that of the convulsions or coma ushering in the attack, and that of the results of the nerve-lesion. To control the convulsions the patient's head should be elevated and cold applied. The bowels should be opened by calomel, followed, if possible, by a saline laxative. The bromides and chloral are appropriate, and the latter may be given by the rectum. In coma much the same treatment

is suitable, but if there is reason to believe that the coma results from exudation, ergot and belladonna are to be preferred to the bromides and chloral.

As regards the paralyzed members, much can be done to keep up the nutrition of the muscles until the affected nerve-cells have recovered themselves, or until their function has been assumed by other cells. The limbs are usually colder than normal, and should be kept warm by a layer of cotton-batting. Daily massage is of very great service, and should be persisted in for months. Mothers are more likely to follow directions in this particular if they have something to rub in, and if a confidence on their part is expressed in goose-grease, it will be prudent to recommend it. Any unguent will do as well, but, of course, the rubbing and the manipulation are the most important factors.

Faradization of the affected muscles is also of very great service. To obtain the best results, both it and massage need to be kept up with the utmost patience and perseverance for many months. The leg and face usually recover first, the arm last and least.

The spastic paraplegias, such as existed in the two cases of Holmes Coote,<sup>1</sup> and in which there was an approach to the development of equino-varus, have been dealt with by orthopedic surgeons. My impression is that the results have not been encouraging.

The brain-lesions themselves, consisting as they do of sclerosis and porencephalus, offer very little to warrant surgical interference. In a few cases the sclerotic area may admit of removal. As in all chronic nerve-disorders, potassium iodide should be tried; it may be of some service if small doses are administered for a long time.

#### THE TREATMENT OF INGUINAL HERNIA.

BY ALEXANDER DALLAS, M.D.,

OF NEW YORK; CONSULTING SURGEON TO BAYONNE HOSPITAL.

ALTHOUGH numerous articles are constantly appearing on the subject, the treatment of hernia has not kept pace with the recent advances in other branches of surgery; and to-day there is no subject of like importance in which there is so little interest taken and consequent want of knowledge displayed by the body of the profession. It is still too much the custom among physicians to consign their ruptured patients to the tender mercies of the druggist or truss-maker, who is totally ignorant of anatomy, and whose only object is to effect a sale. To prove the correctness of these statements it is only necessary to examine the methods of treatment in use at the present time, and as these methods naturally divide themselves into the palliative or

mechanical, and the radical or surgical, we will first take up the palliative. In the palliative treatment of hernia, trusses of various shapes have been used in all ages to prevent the protrusion of the gut, and, if possible, to effect a cure, and the appliances used to-day are virtually the same as those used a century ago. They are all constructed on the same general principle—a powerful spring, a large pad, and a strong strap, and keep up the rupture by the same means—brute force. The application of the retaining force in these trusses is wrong. When applied laterally, as by the usual method, it is used at a disadvantage, and greater pressure has to be employed, while the pad is bound to slip down until it rests upon the pubic bone. When applied from below upward the greatest pressure is at the lowest point, and the injury to the spermatic cord and vessels is intensified. The shape of the ordinary pad, too, is an anomaly, and its usual method of application is unscientific. Its convex surface, driven into the parts by the powerful spring, and kept in constant motion during walking, etc., bores its way into the hernial opening and actually enlarges it. Another equally serious objection to these trusses, and one which has been entirely too much overlooked, is the fact that, in every case, their point of greatest pressure is at and below the external ring, where there is only integument to prevent the pinching of the spermatic cord and vessels between the pad and the pubic bone. We freely admit the evils due to pressure upon the uterine nerves, and we should no longer ignore the equally serious and positive injury due to pressure upon the spermatic vessels, and which gives rise to well-marked symptoms. Recently flat pads and elastic belts have been introduced, but the flat pads only increase the pressure at their lower edges, and elastic belts intensify the injury by the constancy of their pressure.

Forced by these considerations, I have devised for my own patients a truss that appears to meet all requirements. It is light and cool. It rests upon the pelvis—an immovable support. There is no constricting band around the hips to cause atrophy of the muscles and interfere with every movement. There is, consequently, no excoriation to heal up, as the pad is not disturbed. The belt comes down along the flank, breaking the lateral recoil that causes the protrusion, and so acting as an auxiliary to the pad. The pad itself is small, somewhat diamond-shaped, with its surface slightly concave, the better to adapt itself to the convex abdominal walls. The pressure, applied from above downward, is slight and wholly over the internal ring. Running from the center of the face of the pad to its lower edge is a gradually-deepening groove that prevents compression of the vas deferens and spermatic vessels and nerves.

<sup>1</sup> Hardy et Behier: *Path. int.*, iv, 1880.



But there are cases of hernia in which palliative treatment is not sufficient, and in which more radical measures have to be resorted to. Sometimes the hernia is so large or so painful that the patient is disabled; while, in other cases, an operation is desired by the patient or undertaken at the suggestion of the surgeon. For these cases many operations have been devised by different operators, but we are virtually reduced to the consideration of what may be called the American operation. Introduced by a prominent surgeon, and adopted by his followers, it soon became the rage, and, for the time being, has displaced other and better methods. Naturally, we look for points of excellence in it beyond those of the others, but we fail to find them. In performing it all the safeguards that Nature throws around the canal are cut away and packed together in a heterogeneous mass, leaving only a thin layer of fascia and the peritoneum. On this fascia grow granulations which it is claimed form an unyielding cicatrix strong enough to resist protrusion. Now, in other parts of the body we are taught that cicatricial tissue rapidly disappears under pressure and motion, and we direct our treatment accordingly. (We see a proof of this also in the frequency of hernia after laparotomy, and, should a recent suggestion of Tait's be carried out, the number will be largely increased.) And yet we are asked to believe that this particular cicatrix, subjected to incessant pressure and motion from its very inception, will remain firm and unyielding. Is it any wonder, then, that we see so many cases in which the cicatrix has become so thin that the movements of the intestines can be seen through it, with a protrusion so large that no ordinary truss can hold it, and with a sensitiveness so great that no pressure can be tolerated? The victim of this operation always reminds one of the man in the parable, in which we are told that "the last condition of that man was worse than the first." Fortunately, there are better operations than this, but whatever method be adopted, the surgeon should be able to guarantee his patient that, whether successful or not, his condition will not be made worse than it was. The operation that I believe will give the best results with the fewest drawbacks is as follows: Make the first incision along the pubic bone, commencing at the symphysis, and extending outward from three to four inches; then carry a second incision upward at almost right angles to the first, and parallel with the inguinal canal. Dissect up this triangular flap of skin freely, and turn it back, and the whole field of operation is exposed. (Occasionally it may be necessary to make a third incision down over the scrotum.) Dissect down to the sac in the usual way, loosen any adhesions, push the sac well up inside the internal ring, and fasten it to the external portion of the internal ring with strong cat-

gut sutures, bringing the sutures out above and tying them there. Then bring the pillars of the ring together with several sutures, check all oozing, put in a small drainage-tube, turn down the skin flap, and thoroughly coaptate the edges, and you have virtually a subcutaneous wound. The adhesion of the skin over and around the canal gives a firmness to the parts that they so much need; the sac acts as a pad to divert the protruding gut; the approximation of the pillars narrows the canal to its normal dimensions; the resiliency of the now closely adherent, unbroken skin helps in a measure to prevent further protrusion, while there is no external cicatrix to be irritated by the truss that it is always advisable to put on after the operation.

Midway between the palliative and radical treatment of hernia comes the old Heaton method of injecting into the hernial sac an irritant solution to excite adhesive inflammation. With ordinary precautions, and in properly selected cases, this is perfectly harmless and has given fairly satisfactory results. If the irritant be used in powder form the results are even more satisfactory.

When speaking of the indications for radical treatment I said nothing of strangulated hernia, a class of cases that figure largely in hospital reports, and give a high death-rate. All authorities claim that in a considerable proportion of these cases reduction is impossible and operative interference compulsory. This I no longer believe. In all the years of my practice, part of the time surgeon to works employing thousands of mechanics, amongst whom such cases are frequent, I have never had to operate for strangulated hernia, nor had I ever any trouble in reduction since adopting my present method. When called to a case of this kind I at once give an injection of morphine and atropine, to which latterly I add a little cocaine. I repeat this injection every ten or fifteen minutes until the patient is quite comfortable. Meantime I make him drink every five minutes from a half to a cupful of a mixture consisting of: Strong black coffee  $\mathcal{O}_j$ , fluid extract of ergot  $\mathfrak{z}\text{ij}$ - $\mathfrak{z}\text{iv}$ , and occasionally a little strychnine. Generally, within a half-hour the rupture has become flaccid, and gentle taxis reduces it. I use no anesthetics or hot baths, or external applications, and have reduced cases when other physicians have failed. Of 545 recorded cases of strangulated hernia, 260 died. Of these 260 at least 250 could have been saved by the above treatment.

*Professor Benedict*, of Vienna, has been elected an honorary member of the Norwegian Society of Physicians, of Christiania.

*Dr. C. Wedl*, Emeritus Professor of Histology at Vienna, recently died at the age of seventy-six.

# **WIRING THE SPINOUS PROCESSES IN POTT'S DISEASE.<sup>1</sup>**

BY B. E. HADRA, M.D.,  
OF CHICAGO.

IMMOBILIZATION of the vertebræ by wiring their spinous processes to each other is a suggestion thrown out in connection with a report of the same procedure in a case of vertebral fracture. The spinous processes of the vertebræ are firmly held together, and when it is considered that there will be no slipping of the wire if the inter-spinous ligaments and the adjacent muscular structures are preserved, and that three or more vertebræ can be wired, it becomes evident that a resistant posterior brace—so to say—can be established, throwing the body-weight on it, and thereby relieving the vertebral bodies. A second gain is the separation of these latter from each other, or from the inter-vertebral cartilages, which, according to the laws of leverage, obviously must follow. The vertebral bodies will thus be prevented from pressing and rubbing on each other. If this be so, the question arises: Under what circumstances is this method called for? In my opinion, it should be tried as soon as any deviation of a vertebra is discovered. It then will not only do what I have claimed for it, but it will also better prevent permanent disfigurement than any other method, because it is more direct than any other. But if an abscess-cavity has already formed, the surgeon will have to decide whether or not its dimensions are too great to be filled up by new bone-formation. If the abscess-cavity is too large, it may be better to allow the diseased surfaces to come into contact and to unite by bony ankylosis with kyphosis. Under such circumstances the wiring will be out of place. Not so, however, if the destruction of the bodies and of the inter-vertebral discs is moderate. We may then hope for the reproduction of a sufficient amount of bone, and by holding the spine in a straight line we shall obviously enforce a desirable final outcome.

The proposed operation does not exclude other and later operations, such as draining, scraping, etc. As can easily be imagined, it may even become a very useful addition to them. For instance, it may greatly assist in keeping the drainage track patulous. Perhaps, also, before bony ankylosis has set in, moderate kyphosis could be reduced by careful extension and manipulation, and the gain afterward secured by wiring.

It is hardly necessary to point out the advantages the suggested method would offer over all others at our disposal. It would do away with all the annoy-

ances of the apparatus, of the long confinement to bed, and of a number of other troubles connected with the usual treatment. But, as a matter of course, it has to be proved to be practicable, effective, and, above all, free of danger. I know from my one operation (though it was for fracture), and from experiments on the cadaver, that the wiring can be done with the greatest ease, so as to be within the reach of the average surgeon. In children the bones may not be strong enough to withstand the grip of the wire, but three or more processes may be included, and thus a greater resistance obtained. As to the direct danger of the surgical procedure as such, I think nothing is to be feared, as may be inferred from the short description to be given.

A median skin-incision is made over the objective spinous processes. I would advise making it rather too long than too short. Now, the long muscles on either side are longitudinally incised with as little laceration as possible, and held aside with retractors—just sufficiently to allow of a good view of the outlines of the spinous processes. Then, with a strong, curved needle carry the silver wire through the inter-spinous spaces above and below the processes to be wired, in a figure-of-8 fashion, as often as is deemed necessary. Then fasten the ends of the wire by twisting, and close the wound. In lumbar operations simple loops around the processes are sufficient, as the processes stand nearly horizontally, and slipping is therefore not to be expected.

Whether in old cases, with much contortion or kyphosis, when no bony ankylosis has taken place, a division of the ligaments will assist rectification or not, I am not prepared to state. I think the possibility that contracted ligaments can stand in the way of reduction cannot be denied.

Finally, it is well to remember that the needle must not enter too far away from the middle line; otherwise injuries to the nerve-trunks may be inflicted.

## **ORIGINAL LECTURE.**

**INCUBATORS—GAVAGE—INFANTILE SYPHILIS  
—HYSTERIA AND SPURIOUS WOMB-DISEASE—SCHUCKING'S OPERATION—  
OPERATION FOR LACERATED  
CERVIX WITHOUT ANESTHESIA—RECTO-  
VULVAR FIS-  
TULA.**

*A Clinical Lecture  
Delivered at the Philadelphia Hospital, October 24, 1891.*

BY BARTON COOKE HIRST, M.D.,  
OBSTETRICIAN TO THE PHILADELPHIA HOSPITAL, AND PROFESSOR OF  
OBSTETRICS IN THE UNIVERSITY OF PENNSYLVANIA,  
PHILADELPHIA.

I PRESENT to you this morning a premature baby, born at least two months before term, and in such a feeble

<sup>1</sup> Read before the American Orthopedic Association, September 25, 1891.

state that we had to supply it with artificial heat. There are several ways of supplying artificial heat for these premature babies, but it is best accomplished by means of a specially constructed apparatus called an incubator. The one you see here was devised by a Frenchman named Auvard. It is a rather cumbersome arrangement, and would hardly be available for private work, although for hospital-practice it is very good. We can keep an even temperature in this incubator at almost any desired height up to 100°. In the treatment of babies born very prematurely the temperature should be kept between 95° and 100°. This child, although born two months before term, became somewhat acclimated by exposure for a week or two after birth, and so when it was brought into the hospital and placed in the incubator with the temperature raised to 100°, it seemed to suffer from the heat, as it was constantly bathed in perspiration. We now keep the temperature a little lower than 90°, and in that temperature the infant seems to be comfortable.

In the management of premature infants it is occasionally necessary, in addition to supplying artificial heat, to see to an artificial ingestion of food. Such infants are too feeble to nurse in the usual way, and their food must be put into their stomachs. We do this by means of a rubber-tube passed into the stomach, to the end of which is attached a funnel, into which the mother's milk, in dram doses, is poured. This procedure goes under the technical name of gavage. We have had some difficulty in securing human milk for this baby, and were obliged for a while to resort to artificial feeding; during that time the infant went down hill rapidly, and, if we had not secured a woman whose breast could be milked, it would have died. When it first entered the ward it weighed three pounds. Its weight increased five ounces at first, but fell to two pounds and fifteen ounces on the artificial food. We finally found a woman who was willing to allow us to milk her breasts for the child, and the weight began to go up. Since yesterday it has gone up half an ounce; to-morrow I expect to find the weight again increased, and we shall look for a steady rise in weight until the child presents as healthy an appearance as we could expect in any infant born at the natural time and reared in the natural way. As to the results of this treatment in general: In a six months' baby we get successful results in about 22 per cent. of the cases. A six months' baby is, of course, an extreme instance. In a seven months' baby we get success in a larger proportion—in about 38 per cent. of the children. These statistics are from Paris. It seems to me that we obtain somewhat better results at this age than are obtained in the Paris hospitals.

Before dismissing this case let me call attention for a moment to the construction of the two incubators most in use at present. The principle of this incubator is simple enough, although its construction is somewhat complicated. It is a double wooden box, one within the other; there is a compartment for hot water within the outer box and beneath the inner box. The water contained in cans should be almost boiling and changed about every half-hour. Within the inner box—that is, in the upper compartment—lies the baby. We keep a thermometer lying inside, so that we can tell whether the temperature keeps steady, and the child is protected

from the external atmosphere by a glass lid perforated by a chimney.

The second incubator I show you here is made after the German pattern, devised by Cr  d  , of Leipsic: it is simply a double-walled bath-tub of tin or copper, with a space about two inches wide beneath the walls for hot water, which is renewed every four hours.

If exposed to the sudden changes of the atmosphere these babies would almost surely die. Their vital processes are so feeble that they do not furnish a sufficient amount of body-heat to maintain cell-action. We carry about with us a normal temperature of about 98° and over, because there are within our bodies cell-activity and cell-combustion that furnish us with this temperature in spite of any external changes in the atmosphere.

In private practice a specially constructed incubator is not usually to be procured. The physician must supply the premature infant with artificial heat as best he can; consequently he does not get as good results as are obtained in hospitals. My plan in private practice is to put the baby in the bath-tub which has been provided for it, after filling the tub half full of cotton-wool. A mass of cotton-wool is then placed over the infant, leaving a space for respiration, and between the cotton and the sides of the tub are placed a number of medicine or beer bottles filled with hot water. In this way one can keep up about the child a constant high temperature, if the hot bottles are renewed frequently enough. It requires, however, the constant attention of the nurse or other intelligent person.

I present to you next a case of infantile syphilis that, unfortunately from the clinical teacher's point of view, has done so well that it is not half as good a case for demonstration as it was a day or two ago. The skin-eruption has improved so rapidly under treatment that the case is no longer typical. There is, however, enough left on the back to show something of the character of the eruption, and the improvement demonstrates the good results of the treatment. As you notice, there is in this case a trace of the syphiloderm on the soles of the feet and palms of the hands. This is a characteristic situation for syphilitic skin-affections in young children. When I first saw this infant a week ago it presented a much more characteristic appearance, and the efflorescence had a peculiar copper color. I found that the child had been treated by mercurial inunction, a very common plan of treatment, but without much benefit. In addition to this, mercury was ordered internally in the form of calomel, beginning with one-twelfth of a grain twice a day, and the improvement has been wonderful. We have a very good substitute for calomel in mercury with chalk, which is not so aperient. The success of treatment in this case justifies Hensch's assertion that, with the internal administration of calomel, specific eruptions in infants can be, so to speak, wiped off the skin as one erases a chalk-mark on a slate.

Here is a patient of a kind that you will often see in your private practice. She presents a form of disease in connection with which you must be on your guard against a very common mistake. I shall develop her history before you to show you how easy it would be to make a mistake in diagnosis if too much reliance be placed upon a woman's statements and beliefs when she is possessed with the idea that she has "womb disease."



I shall read you her history as I obtained it yesterday. About a year ago she found that she was unable to work as well as before. After a little while she found it impossible to go up and down stairs upon her feet, and she was obliged to go up and down sitting upon each step. After a while even this mode of locomotion became impossible, and she spent the whole day upon the lounge. After about three months of this sort of thing she felt something "rip in her back," and with this symptom she had a profuse dark discharge from the vagina. In addition to these symptoms she had a great deal of abdominal pain, worse when she attempted to walk, so that she went to bed and has been there ever since.

She has been under the care of physicians in her own home, a town in the interior of the State, who have "doctored her for womb trouble." So long as she was treated for the womb trouble she felt perfectly well, but was still unable to walk. So soon as the treatment ceased the pains returned. She described the pains as neuralgic, or as "stitching" pains, in the lower part of the abdomen. This is the history in the main that this patient presented to me yesterday, and it is a very typical history indeed, with one exception. In my experience these women usually have the name of some definite disease of the genitalia, the symptoms of which they may describe with surprising accuracy, or they believe themselves the subject of some peculiar and impossible disease of the womb; for example, I saw yesterday in consultation a woman who said that she had a tumor of the womb, six inches long and two inches wide, which her former physician, a homeopath, had been removing inch by inch.

On examining this woman before you, I find her genitalia perfectly normal, with the exception that her womb is somewhat undersized. It is, as you will have already recognized, a case of pure hysteria with imaginary womb disease.

When a woman goes to a general practitioner with such a history, he too often jumps to the conclusion that there must be some uterine or ovarian disease. His inability to find anything on vaginal examination is ascribed in his own mind to lack of skill in making a gynecological diagnosis, which he is afraid to confess. Or perhaps some slight abnormality is discovered that the physician honestly believes to be the cause of the woman's troubles. Finally, the physician may be an unmitigated rascal who trades on his patient's gullibility and too great readiness to believe anything that is told her about her womb or ovaries. In any case the unfortunate patient is treated by the introduction of the sound and by applications to the endometrium, until she very likely acquires some inflammatory process about the womb, which permanently impairs her physical condition and prevents the repair of her nervous system. My experience with these nervous women who present symptoms of uterine and ovarian disease—and it has been considerable in the Orthopedic Hospital and elsewhere—leads me to the conclusion that the majority of them have nothing abnormal in the genitalia, except often an ill-developed womb. It is an interesting fact that many a case of ill-developed nervous system will show ill-development of the genitalia as well. There is a minority, however, in which the hysteria rests upon a

basis of disease in the pelvic viscera. These cases are most distressing. Their hysteria will not, as a rule, improve until the pelvic disease is removed, but an abdominal section is a peculiarly dangerous operation in such women. A large proportion of them die from shock and sepsis, even in the hands of the best operators.

Women like this one before you, if you inquire carefully into their history, will almost always give you an account of some grief, some nervous shock or strain. That was so in the present case. The nervous system lacks vigor and resisting power often by reason of bad training from childhood, often as the result of heredity. Nervous strains that you or I could bear, crush these inadequately equipped individuals. The balance-wheel of their nervous system is destroyed, and their nerves run riot. There is not one of us that has not the impulses, perhaps ill-defined, of these hysterical creatures, but our reason and will-power restrain them. Every woman's attention is attracted to the genitalia by the recurring menstruation and by slight symptoms of pain or discomfort at intervals, and every woman must have felt at moments that there might be something wrong in the genital region. These fears, however, a clear reason and a strong will dissipate. Not so with the hysterical woman. Her attention, once attracted to a possible ill, dwells upon it until the unreal becomes subjectively the real. It is not by treating the imaginary complaint, but by dealing with the fundamental disorder that such a woman can be cured.

I have a patient in the wards upstairs whom I would like to bring before you, but to do this is at present inadvisable, because she is suffering from chronic diarrhea, and I do not care to risk exposure to the cold, so I will simply describe the case. She is a woman who has a complete prolapse of the uterus, in addition to the chronic diarrhea, and perhaps as a consequence of it. When she goes about on her feet the uterus drops altogether out of her body, carrying with it the inverted vagina and the bladder. Operations for the relief of these patients have long been the opprobrium of gynecology. The plastic operations for the contraction of the vagina are often failures. The same judgment must be passed upon operations for shortening the round ligaments, and upon stitching the uterus to the abdominal walls. Moreover, this last procedure is distinctly dangerous, and therefore unjustifiable.

A woman can live indefinitely with a prolapse of the uterus. It is uncomfortable, even distressing, but not dangerous to life; therefore it is not right, in my opinion, to operate for this affection when the operation entails a certain risk of life, and by no means insures relief. The conscience of the gynecologist is apt to be callous on this point, so that he should guard himself with care against yielding to the temptation of performing abdominal section on too slight grounds.

Three years ago an operation was devised by Schücking for chronic retro-displacement of the womb. This operation consists in passing a thread into the uterine canal, through the anterior uterine wall at the fundus, and through the vaginal wall at the anterior vault. This is accomplished by a concealed needle, which I exhibit to you. You see the instrument is a hollow uterine sound with a good curve and a long handle. Within

the sound is the needle, which, being threaded, is passed to the fundus uteri within the sound, and is then pushed forward by this little catch on the handle until it comes into sight at the anterior vaginal vault. The thread that it carries is drawn out a little so as to make a loop, through which is passed the ligature-thread. The needle is then withdrawn, and the instrument removed from the uterus. The ligature-thread will then be seen with one end hanging from the anterior vaginal vault, and the other end coming from the os uteri. If these two ends were tied together the uterus would be pulled into a position of anteversion, and even ante flexion. There would, however, be considerable cutting of the cervix and vaginal mucous membrane by the ligature, which must remain in place several weeks. To prevent this, the ends of the ligature are each passed through a button, and then either clamped with a perforated shot or tied. It is well to remember that a clamp-shot will not hold a stitch if there is much strain put upon it. You can clamp a shot upon a silkworm-gut or a silk suture with all your force, and still be able to pull it off with the greatest ease. This operation has been done more than two hundred times (two hundred and seventeen at the last report) in Germany, and a few times in this country by one operator, Dr. Boldt, of New York. After a thorough trial, which has proved its efficacy in backward displacement of the uterus, it has been tried lately for prolapse of the uterus. Five women have been operated upon with perfect success. In one the uterus was exceedingly large and totally prolapsed. In two cases I believe the patients have been field laborers, and have resumed their hard labor after the operation without suffering a recurrence of the prolapse.

Theoretically, the "vaginal fixation" of the uterus, as it is called, would seem to be a rational treatment for prolapse. As long as the womb is held anteverted its descent through the vaginal canal is improbable. And, moreover, the fixation of the fundus at the anterior vaginal vault to the connective tissues between the bladder and uterus by adhesive inflammation would seem to be an additional safeguard against descent. Clinical results, however, constitute the crucial test, and I shall watch the outcome in this case with great interest. The operation that I propose to do in a day or two has not, I believe, been done before in this country. I shall report the result to you after sufficient time has elapsed to enable me to judge whether the prolapse has been permanently cured.<sup>1</sup>

<sup>1</sup> The operation was performed by Dr. Hirst in the gynecological ward, following the plan described in the lecture. The Schücking needle was passed into the uterine cavity concealed in its tube. The uterus, seized by a tenaculum, was drawn down toward the vulva and well backward; the needle was then pushed through the entire extent of the uterine wall at the fundus until it appeared in the vagina; the thread with which it was armed was seized and drawn out so as to make a loop by which to carry a stronger thread back again through the uterus; this being accomplished, the end projecting from the os uteri was threaded in a needle and passed through the anterior lip of the cervix. The operator then took two perforated plates of lead, about a half-inch in diameter, and, passing the threads through the perforations, clamped them with heavy shot. In this way the uterus was fastened at the level of the anterior vaginal vault in a position of extreme anteversion, and to some degree of ante flexion. It is to be hoped that the operation will prove a success, as seems likely to be the case, for

Our next patient has heart-disease in the shape of mitral insufficiency; she has been suffering with bleeding piles, and has in addition to her other troubles a very badly lacerated cervix. The cervix is split to the vaginal vault on both sides, and there are present local and reflex symptoms that are often associated with this condition. I have had her under general treatment with digitalis, on which she has improved considerably, and I have treated the hemorrhoids with suppositories of tannic acid, iodoform, and extract of belladonna, and with the ointments of galls and belladonna in equal parts. The woman is very much improved; the heart has become stronger; the disturbance of circulation has been diminished, and the piles have been much improved. The cervix remains, of course, as it was.

I have determined to operate on the cervix without giving ether, as I am afraid of an anesthetic in view of the heart-disease. The woman is perfectly prepared to suffer a little pain. There are many hospitals in which this operation is always done without an anesthetic, as the cervix is an insensible part of the body, and can be "insulated," to use a Teutonism, as no other part of the body can be, without extreme pain. The operation for a lacerated cervix is easy to perform, and ought not to consume much time.

I have evolved a technique of my own in this operation, as everyone does after a little personal experience. It is as follows: The lips of the cervix are seized with double tenacula made after my own pattern, and are widely separated; the area to be denuded is then marked out with two or three strokes of a knife. This area is then denuded on both sides by a few clips with Emmet's scissors; the entire denudation is completed in about two minutes. The stitches are next introduced, beginning at the upper angles of denudation, using for this purpose stout semi-circular needles. The two stitches below on either side are inserted with straight needles. As a rule, six stitches are quite enough, but it is well to have ready two more in case the tips of the cervical lips need more accurate apposition. The ligatures of silkworm gut are clamped with perforated shot, and just before each shot is run home a stream of water from an irrigator is directed upon the wound. During the ten days that this patient will lie in bed we shall proceed with the treatment of her heart-affection, and shall endeavor to relieve her internal piles. We shall try to send the woman out of the hospital in just as good a condition as possible, and there is no reason why she should not live in comfort for a number of years, if she can avoid hard physical labor, and can find some suitable occupation as, for example, that of a seamstress.

I have devised the following plan for carrying my gynecological instruments. I keep them in a metal box, which, when taken apart, furnishes me with two metal pans, very convenient for the antiseptic solutions used in preparing the instruments for operation. In private practice, the most convenient antiseptic fluid is boiling water, which I use as an antiseptic whenever practicable.

The first step in the prolapse is always the retroversion of the uterus. After the long axis of the uterus is brought in coincidence with the long axis of the vagina the descent of the uterus follows easily. All that can be seen after the operation is a couple of lead plates, one in the anterior vaginal vault, and the other on the anterior lip of the cervix.



As I denude the cervix you will notice that the patient scarcely winces until I approach the vaginal vault, where the tissues are more sensitive. You notice that I leave at least a quarter of an inch of undenuded mucous membrane down the center of each lip, internally, so that the restored cervical canal shall be of good caliber. I was once obliged to artificially dilate the canal after an operation of this sort performed by another surgeon.

Care should be taken not to cross the stitches; if this should be done the circulation below will be cut off, the tissues will slough, and the patient might suffer serious consequences. Six stitches are enough in this case. The cervix, you will observe, is restored to its natural conical shape, and there is no longer a gaping of the lips, with the exposure of delicate mucous membrane, which was never intended to be subjected to the constant irritation of exposure to external influences.

The woman has stood this ordeal remarkably well. She does not complain of the pain of cutting and stitching, but of the dragging down of the uterus. The main reason for giving ether in these cases is to secure greater relaxation of the vaginal canal and outlet, so that the operator can work conveniently and to the best advantage.

The next patient I present to you is a woman who gives us a history very similar to that of the hysterical patient whom I have just shown you. She is a girl, twenty-two years of age, who complains of pain all over the abdomen and insists that her womb is out of place. She claims that at times it falls out of her body. She is firmly convinced that she is suffering from some uterine trouble. I made an examination yesterday and found that she had a slightly retroverted uterus of a rather infantile type. There never could have been the slightest degree of prolapse. She made such a fuss about the examination and held herself so rigid that it was impossible to find out just what was the matter, if anything, beside a slight grade of retro-displacement. She lies in bed all day, refusing to get up; she will not answer questions unless we insist upon it, and she has that peculiar vacant, sad, introspective expression that is characteristic of melancholic patients. Her mind is fully made up that she has serious uterine trouble. I will be able to tell you in a moment whether she has anything worth complaining of or not, as we shall anesthetize her. On etherization I find that there is not a thing the matter with this woman's pelvic viscera. Her uterus is slightly retroverted, but this condition makes no real difference, for the uterus is of the infantile type which, as I have explained to you in studying the other hysterical patient, is so frequently found in hysterical girls. This is a case of hysteria, and the woman should be sent to the wards for nervous diseases. These women come to the receiving-ward here and give a distinct account of womb trouble that deceives the hospital-physicians just as it often deceives the general practitioner.

This woman, if she had money, would very likely go from physician to physician to be treated for her imaginary womb trouble, until in consequence of repeated intra-uterine examinations and applications, she might in reality acquire a septic inflammation of the pelvic organs that would permanently destroy her health.

I next exhibit to you the result of an operation I did

here two weeks ago for a recto-vulvar fistula, the result of a kick upon the vulva inflicted by the woman's husband. There was a tear an inch or more in length, running across the floor of the vestibule, the edges of which I denuded and sewed up. Union has occurred in the angles of the wound, but not in the middle. The wound burst open for some reason or other nine days after the operation. Up to this time all the feces passed by the bowels, but on the ninth day the woman complained that the feces were again passing by the vagina. When the resident physician came to remove the stitches he found only five of the seven that had been inserted; on inquiry, he learned that the patient herself had pulled out two of them. From this history I presumed that she had been pulling on the stitches and is herself responsible for the imperfect result, although she tells me that she did not interfere with the wound until she felt the feces coming through the vagina. This is the first time I have failed of success in an operation of this kind, although it is quite common not to get complete union in one operation for fistula, and so I do not feel discouraged. In cases of very extensive vesico-vaginal fistula I almost always expect to operate two or three times. There is a woman in the hospital on whom I operated for a vesico-vaginal fistula large enough to admit three fingers that had resulted from pressure exerted upon the vaginal walls by a pessary that had been allowed to remain in the vagina too long. The first operation secured about an inch of union; I operated again and secured half an inch more, and the third operation cured the woman perfectly. A short time ago I performed a like operation on a woman who had a very extensive opening into the bladder, the result of a mismanaged labor. She had been in labor some three days when the physician in charge applied forceps and used great violence in the extraction of the child, which was dead. The perineum was horribly torn, and a few days after labor the urine began to dribble through the vagina. There had been a slough of the anterior vaginal wall in consequence of the prolonged pressure of the head upon it. The cause of the difficulty was a rachitic pelvis that had never been discovered. In this case I closed the greater part of the opening in the first operation, but shall be obliged to operate again to effect a cure. There are cases on record in which women have been operated upon some sixteen or eighteen times. It is a consolation to know that a cure can be secured in the vast majority of cases with patience and persistence.

In the present case, as some of you may see, there is but a small opening left in the center of the former tear, which does not compare in size with the original opening, and which I am convinced will be successfully closed by the next operation. I shall advise the woman to go about on her feet for a few days before again operating and confining her to bed. It is my custom after these operations to keep the bowels freely opened every day. This I did after the first operation and shall do again, as I am convinced that the results are better than by the old plan of locking the bowels up for a week or more with opium.

Professor Borgsiekiwicz, of Innsbruck, has been called to the Chair of Ophthalmology at Gratz.



## CLINICAL MEMORANDA.

## THE USE OF TOBACCO IN INTESTINAL OBSTRUCTION.

BY W. D. JONES, M.D.,  
OF RISING CITY, NEB.

I HAVE searched the literature at my disposal to secure the most reliable information regarding the therapeutic uses and applications of that much-abused weed—tobacco.

Almost every author of a materia medica or therapeutics gives tobacco only a passing notice of its applications, usually followed by so positive assertions regarding its dangers that the average student and practitioner dismisses the subject with fear and trembling.

While it is evident that, like most of our drugs, this must be used very cautiously and with a thorough appreciation of its application to proper cases, it seems that a great deal of the danger feared from its employment is groundless.

My observation and practical experience in the therapeutic applications of tobacco have been confined to its employment in the treatment of strangulated omental hernia, hepatic and renal colic, and fecal impaction of the large bowel. Properly and judiciously employed, I consider it one of the most efficient remedies of a palliative character available by the practitioner for treating cases of fecal obstruction of the intestines.

In a former number of THE MEDICAL NEWS I have specified its application, assisted by gravitation, in the treatment of strangulated omental hernia, with the report of a case. To be of marked benefit, it must be applied *ad nauseam*. Owing to the depressing nature of the drug, it should not be employed in cases of young children or in delicate adults.

CASE I.—I was called in consultation to see Mary R., a stout, healthy girl of fourteen summers, suffering from fecal impaction of the large bowel, complicated with an overloaded stomach, the result of having eaten a large number of rather hard apples.

The child was first seen in convulsions, for which she had received the usual course of antispasmodics, with morphine to relieve pain and apomorphine to produce emesis, with no result. I suggested the use of a tobacco enema, made by adding half a dram of good plug chewing-tobacco to half a pint of boiling water. Owing to the urgency of the case, this was cooled as rapidly as possible, and the entire quantity injected by means of a Davidson syringe with a long rectal tube. The enema was retained for about twenty minutes, when we had the satisfaction of seeing our patient under the pressure of a double evacuation, followed by immediate relief. The patient's recovery was uninterrupted.

CASE II.—I was called one morning at an early hour to see a strong and healthy laboring man, about sixty years old, with the following history: He had not had a free movement of the bowels for several days, and had been doing some hard lifting during the previous day; the bowels were tympanitic, with severe enteralgia, palpation being impossible on account of pain and tenderness. I gave him large doses of morphine with atropine

hypodermatically and by the mouth, with copious warm-water and soap enemata, with no result.

I then administered an enema of tobacco—of a strength of one dram to a pint of boiling water, and allowed to cool to a proper temperature—by means of a Davidson syringe and a twenty-six-inch rectal tube introduced to its full length. The patient commenced to experience some relief from pain in fifteen minutes, and to suffer somewhat from nausea. In twenty minutes from the time the enema was given there was a copious fecal evacuation, with immediate relief, followed by a quiet sleep. No further attention was required, and the patient was able to be up and about on the following day.

Should I deem it expedient to use this method in the treatment of a delicate individual, I would fortify the patient against any undue depression that might follow the remedy by administering an ounce or two of good whiskey, with a half-dram of the aromatic spirits of ammonia, a few minutes prior to giving the enema.

Instead of the ordinary Davidson syringe, I would suggest the use of a long rubber tube attached to a suitable reservoir placed at a height ranging from four to ten feet.

## CASE OF PREMATURE LABOR WITH OCCIPITAL HYDRENCHEPHALOCLE.

BY J. W. WILLIAMS, A.M., M.D.,  
OF PATERSON, N. J.

MRS. T., twenty-five years of age, a primipara, pregnant seven months, was admitted to the Paterson General Hospital January 14, 1890. True labor-pains, strong and frequent, had already begun. The position of the child could not be ascertained by abdominal palpation. The fetal heart-sounds could be indistinctly heard a little to the left of the umbilicus. The mother's abdomen was unusually large. Vaginal examination detected the os dilated and the membranes protruding in "glove-finger" form. The presentation was found to be a breech in the left sacro-anterior position. Although uterine contractions were forcible and frequent, but little progress was made at the end of four hours. The membranes were then ruptured, the amniotic fluid in excessive quantity coming away with a gush. About twenty minutes later the breech descended, and soon the body and arms were delivered; but here progress ended. The after-coming head resisted all efforts to deliver by traction, notwithstanding the fact that flexion of the head was complete and the size of the fetus small. Finally, after stronger traction, there was a sensation as though something had given way. The head was delivered suddenly, with a gush of fluid, and the cause of the obstruction was seen. This was a tumor arising from the occipital region and hanging down on the back of the child. The tumor was about the size of the child's head, although a large part of the fluid contents had escaped from a tear made at its base by efforts to deliver, and it is inferred that originally the tumor must have been at least twice the size. The tumor was covered by integument; hairy on its upper half. Examination showed the greater part of the occipital bone and two upper cervical vertebræ lacking. Through this gap had protruded the tumor-contents, which consisted of the cerebellum and greater part of the cerebrum and cerebro-spinal fluid. The remainder of the bones of the cranium and face were well

developed. The fetus was kept alive for half an hour by artificial respiration. It weighed eight hundred grams and was thirty-two centimeters in length. The mother recovered well.

#### ANTIPYRIN IN WHOOPING-COUGH.

BY AMOS SAWYER, M.D.,  
OF HILLSBORO, ILL.

In an epidemic of whooping-cough, three years ago, I depended entirely upon antipyrin, and effected a cure in from ten to twenty days, the shortest time being seven days, the average fourteen. My plan was to try to anticipate the paroxysm of cough by administering the remedy every three or four hours during the day, at the onset, lengthening the interval as the disease subsided.

In an obstetrical case, a two-year-old child, suffering with whooping-cough, slept in a bed of its own in the chamber with its mother. I advised the removal of the child before the baby was born, as well as that it be kept away from the other children until the time of danger had passed. The mother thought such precaution unnecessary, and the child remained in the room. Twelve days after birth the baby presented symptoms of whooping-cough, and for a few days it seemed that it would die from the violence of the paroxysms. After the administration of antipyrin in anticipation of the attacks, however, they gradually lessened in frequency and severity, until at the end of two weeks they ceased entirely.

I have administered many ounces of antipyrin to patients from a few days old to adult age without having witnessed an untoward symptom, possibly because, if it does not produce the desired antipyretic effect after the second dose (10 grains, repeated in an hour if necessary), I discontinue its use; or because I have been fortunate enough to escape coming in contact with a patient possessing an idiosyncrasy in this direction.

#### MEDICAL PROGRESS.

*The Heredity of Hemophilia.*—LIMBECK (*Prager med. Wochenschr.*, No. 40, 1891) presents the genealogy of a family for four generations in illustration of the hereditary transmission of hemophilia. The disease was first observed in the great-grandmother, who lived to be seventy-five years old. At sixty, severe epistaxis set in and continued at short intervals until death. The great-grandfather evinced no tendency to hemorrhage. These two gave birth to three children—two sons and a daughter. Neither of the sons, and none of the four children of the elder son showed any tendency to hemorrhage. The daughter, on the other hand, at puberty, began to suffer with profuse and sometimes protracted epistaxis. As a result of her marriage, fourteen children were born. Four of these died in infancy and childhood and a fifth at sixteen. To the epistaxis of the mother was added profuse post-partum hemorrhage, and she died at fifty after hemorrhage from the genitalia, mouth, and nose. The oldest child, a male, and his three sons presented no manifestations of hemophilia. In the second child, a female, profuse hemorrhage from nose and mouth had taken place since puberty. Her only child, a male, had since fourteen had severe

and frequent epistaxis. A third child, a male, had had slight hemorrhages in youth but not in later life. His child was free from disease. The fourth child, a female, like her mother had bled from nose and mouth since her twelfth year. She bore four children. The first, a male, and the second, a female, suffered from occasional, severe epistaxis; the third, a male, had severe and frequent hemorrhages from nose and mouth; the fourth, a boy of five, presented no abnormal manifestations. The fifth child, a female, had been a profuse bleeder since her fifth year; she had aborted three times and had no living children. The sixth child, a male, had had frequent hemorrhages, particularly from the nose, since his eighth year; his son, a year old, had had none. The seventh child, a female of twenty-seven, and her son, had no hemorrhage. The eighth, ninth, and tenth children were males and bleeders. The eighth had presented decided symptoms of hemophilia since his seventh year and died at sixteen, it was said of cerebral hemorrhage. The ninth child was a moderate bleeder until his fourteenth year, but subsequently was free from hemorrhage. The tenth had had profuse hemorrhages between his sixth and eighth years, when they temporarily ceased, but after an interval of two years recurred.

*Removal of a Fragment of Steel from the Retina by means of the Electro-magnet.*—THOMPSON (*Lancet*, October 24, 1891) has recorded the case of a blacksmith who was struck in the left eye by a fragment of flying steel. Both eyes soon displayed evidences of irritation, with considerable impairment of vision in the left. Ophthalmoscopic examination of the injured eye revealed the presence of a foreign body in the retina, together with slight exudation and hemorrhage, and a number of fine, opaque striæ in the vitreous body. The patient being etherized, the original wound was reopened and the curved pole of an electro-magnet was introduced and passed through the vitreous in a direction corresponding to that apparently traversed by the foreign body. The second application was followed by the appearance of the bit of steel "in tow" of the magnet. The small bead of vitreous that presented was snipped off, the eye was antiseptically irrigated, and a compress was applied. In the course of a short time the manifestations of irritation subsided and vision became improved, though a slight patch of opacity remained upon the retina, and the field of vision was correspondingly limited.

*Combined Pylorectomy and Gastro-jejunostomy.*—JESSETT (*Lancet*, October 24, 1891) has reported the case of a married woman, thirty-eight years old, who had borne six children, but presenting no family history of carcinoma or tuberculosis. For more than a year there had been vomiting at irregular times, and there was constipation. Pain, emaciation, and debility soon followed. Some eight months previously to coming under observation, a few days after a twin-labor followed by puerperal fever, a small tumor was detected on the right side of the abdomen. A diagnosis of pyloric obstruction of a malignant character was arrived at, and pylorectomy in conjunction with gastro-jejunostomy, by means of bone plates, was performed. The course of the case subsequently to operation was most satisfactory.

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PHILADELPHIA.

SATURDAY, NOVEMBER 28, 1891.

#### PHYSICIANS SHOULD DISPENSE THEIR OWN MEDICINES.

BECAUSE:

1. *Chemical and pharmaceutical science and art have reached such perfection that it is now possible and even convenient to do so.*

In former times, in order to get the physiological actions and therapeutical effects of a drug it was necessary to give large doses, the essential principle being mixed with large quantities of neutral or alien matters. The impossibility or inconvenience, therefore, of carrying with one an outfit of medicaments sufficient to meet any emergency that might arise, differentiated the professions of medicine and pharmacy, and created a dependence of the physician upon the druggist that at the present time, and under changed circumstances, is working injury to the medical profession. It is to-day possible to carry in one's vest-pocket a supply of concentrated alkaloids and extractives of all the chief articles of the modern materia medica amply large and sufficiently varied to cope with all ordinary cases of disease that one may be called to see. Pharmacological science has of late made wonderful progress, and the richness and diversity of the elegant preparations made by the best laboratories excite genuine surprise and praise. To hand the patient the day's supply of these marvellous little

triturations, discs, pellets, tabloids, or alkaloids, is less trouble than to write a prescription.

2. *It saves the patient money and trouble.*

And why should we not desire to do this? To the vast majority of patients the question is one of great importance. The druggist's bill is doubtless small enough, but it is often unnecessary. Not only the very poor, but even those not poor, feel sufficiently the loss of time and labor incurred in the course of any illness; the worry and care are poignant enough without the unnecessary addition of the apothecary's charge. The interests of patient and doctor are closer than those of doctor and apothecary, and our solicitude for the patient may reasonably be extended to such pertinent things. The sacrifices of loved ones for their sick constitute one of the most pathetic of the many things that touch the heart of every sympathetic practitioner. It is but the simplest duty to spare them a useless addition to the burden.

The druggist must charge about the same for the filling of a prescription either for a small or large quantity of medicine. In acute diseases one kind of medicine is required for but a few doses, when a change is demanded. There is a rain of new prescriptions, much expense and trouble is caused the patient, and the accumulation of bottles of unused medicines produces malevolent suggestion and discontent. All this is different when the day's supply is given with the day's visit. The plan also adds but the slightest amount, or none at all, to the physician's expenses. These preparations are almost absurdly cheap. Even if no additional charge be made, the increased practice resulting would fully compensate the little and temporary increase of professional expense.

3. *The ordinary character finds it hard to pay for simple advice.*

The average person, and even many of the best of our patients, feel some resentment when called upon to pay for advice pure and simple. In matters non-professional everybody is so more than willing to give everybody else the article wholly gratis, that to many it seems like impertinence to ask payment even for the medical variety. The quack, with his unrivalled scent for the foibles of human nature, has profited by this fact, and even if he give only smells and oceanic dilutions of an essential principle, the medicine, or supposed medicine, is given—with the advice, and the patient is grateful for getting *something* for his money. Among



the little things that, as causes of professional success, we in our short-sightedness are prone to overlook, this little factor has doubtless been wondrously effective in biasing the minds of many patients for so-called homeopathy. Placebos and imagined therapeutics form the essential element of many a hoary and tattered medical joke, and the corresponding psychological fact must be well-rooted in human nature. It therefore obtains that even if no more worthy and weighty reason existed, one might gladly throw this innocent sop to Cerberus. But, happily, better reasons do exist.

4. *In emergency cases and in severe forms of acute disease time is saved and the disease more effectually withstood by the immediate administration of the needed remedy.*

Every practitioner knows that in many cases greater promptitude in the administration of the medicine would be a decided gain in the control of the disease. Doubtless many a critical stage has been passed in which life might have been saved had the needed drug been at hand and immediately given. The trip to the pharmacist and the *de novo* preparation of the compound by him (already prepared and in a hundred forms already present on the druggist's shelves!) waste valuable time. In country practice, especially, this is a very important consideration.

5. *The accidents of prescription-writing and of prescription-filling are lessened, while at the same time (with proper care and watchfulness over laboratory preparations) the efficacy and physiological effects of drugs are assured.*

It needs no mention of the self-evident fact that if prescriptions are not written, there will be no mistakes made in writing them, in reading them, or in compounding them. The frightful accidents almost daily happening, the sorrow, and the medico-legal misery consequent thereupon, would not exist. A physician would hardly make a blunder in giving the drug himself, and the possibility becomes almost *nil* when we recollect that the dose is parcelled out and labelled in the pharmaceutical workshop and with an accuracy unapproachable by the apothecary.

It would follow, that to have trustworthy assurance of standardization, solubility, etc., the medical profession should be able to certify to its members the preparations of certain manufacturers as reliable. At present there are a number of manufacturers whose products are beyond suspicion. A plan should be agreed upon by the two interested pro-

fessions whereby the desired guarantee could be given, watchfulness secured, and the dangers of commercial avarice averted.

There would necessarily follow—and indeed, it should long since have been routine—that medical students should be instructed in the values and varieties of these preparations, and before graduation should become entirely familiar with them. The elder teaching of materia medica, the medieval pottering over botanical and laboratory trivialities must give way to civilized ways, and to the *knowledge of the use of finished products*. The pharmacologist and the chemist are noble allies and helpers, but they are not physicians, nor, if excelling in their work, have they time to be. Neither has the clinician the time to do their work. The professions are henceforth different. As to the drugs he uses, it is now no more requisite that a physician dig the roots and herbs, or execute the thousand chemical and pharmacological manipulative details required in the perfection of his preparations, than that as to his knives and forceps he should dig the iron, smelt and temper it, and learn the thousand technical details of the instrument-maker's art. With its infinite differentiation of function, civilization has rendered all this useless. The physician's task is to intelligently use the instruments (triturate, tablet, alkaloid, or surgical knife) furnished him by his friends and allies, the chemist, the pharmacologist, and the instrument-maker. If these shirk their duty there are speedy and effective ways of punishment.

And if commercialism is suspected of bribing the teacher, that too will come to a righteous ending.

6. *It will lessen the evils of hospital abuse, drug-store doctoring, the system of druggists' commissions to physicians, and of counter-prescribing.*

There can be no doubt that the wretched hospital-abuse—that encouraged parasite that is sucking the life-blood of his foolish host—is largely a product of this unnecessary exaggeration of the mechanics of treatment. Doctor and druggist are, in combination, "too much for" many poor souls that can so easily escape the charges of both by the debauching charity of their sentimental pauperizers. The young practitioner thus denied his legitimate *clientèle* by those who should be his helpers, may take a hint. He will secure the gratitude of his patients and increase their number by dispensing his own medicine.

The drug-store doctor can thus legitimize his

ways, and instead of turning his prescription over to his clerk to collect the fee by a double charge for the drug, he may charge for advice *with* medicine and not be ashamed to look at himself in the mirror.

"Division of the spoils" by druggist with doctor—more common, alas! than we like to know—would thus be checked, and probably the sponger of medical advice would get ashamed to pester the druggist and the soft-hearted physician.

It may perhaps be said that the plan is nowadays beneath the dignity of the aristocratically inclined modern physician. If that be the sole argument against it, the answer would be brief and pointed: Dignity to the dogs! The physician that in such matters thinks first of his dignity is a square peg in a round hole. He is out of touch both with his countrymen and with his fellow-practitioners.

It is by no means contended that the plan advocated can have an absolute and unexceptional realization. Judgment must modify all hard and fast rules. In cities where competent pharmacists and full supplies are close at hand, it may be preferable to continue the older method. But the city is a small part of the Country, and those desiring to adopt the plan suggested, may feel every warrant of good reason to justify their practice of it. It is both good morals and good medicine.

#### THE LESSON OF A MALPRACTICE SUIT.

THE plaintiff in a suit for malpractice brought in the Philadelphia courts has been non-suited, and in order to bring out the moral of the story, we give some of its details:

On March 15, 1889, the plaintiff visited a market in West Philadelphia, and, accidentally stepping on a knife, the point was thrust through the tendo Achillis. She immediately summoned Dr. A. F. CHASE, who, finding a narrow punctured wound with but little separation in the tendon, and no bleeding, carefully dressed the parts, with the foot extended so as to relax the gastrocnemius. Thinking that the case might get into the courts, Dr. CHASE asked Dr. O. H. ALLIS to see the patient five days after the accident. The wound was then healed, with evidence of separation of the tendon of about a quarter of an inch.

The butcher before whose stall the accident happened was anxious to make all reasonable amends,

offering to pay the woman for lost time and to meet the necessary expenses of the injury. This was not satisfactory, and suit was accordingly entered against him. Before the suit could be brought to trial he sold out his business and left for parts unknown.

The plaintiff then consulted her lawyer with reference to bringing suit against the market company. This, he assured her, would be useless, and, finding that suit was to be brought against the attending physician, the lawyer gave up the case.

About this time the plaintiff, desirous of getting outside medical testimony, engaged a carriage, was driven to a well-known hospital, was carried tenderly into the "out" surgical department, and, after the examination, was again carried tenderly back to her carriage, having, as she thought, gained some important medical testimony as to what would have been proper treatment of the original injury. She also engaged the hospital surgeon to attend her at her home. Unfortunately for her, but quite the reverse for the defence, it was observed that in the evening of the same day the plaintiff was seen to leave her home and walk to a neighbor's, apparently as if nothing had happened to her.

Fortified with additional medical testimony, counsel was again employed, and action brought against Dr. CHASE in March, 1890. Witnesses were subpoenaed and every preparation made for the trial, but for some reason the case was continued. Again in April it was on the list, and again deferred, and finally, in October, 1891, the plaintiff was non-suited for non-appearance.

The point to be emphasized is one that occurs in nearly all suits for malpractice. Physicians hear and credit the statements of the plaintiff, and then freely state what should have been done at the time of the injury. Upon the testimony of the hospital surgeon the plaintiff felt she had a good expert witness, but when he learned the facts of the case, as presented by two competent medical witnesses, his remarks to the plaintiff were recognized as untrue and unjust, and their retraction would be necessary in open court. There is no doubt that the plaintiff learned that she could not depend on the surgeon of the hospital, and this fact, together with the difficulty she had experienced in getting another physician to serve her purpose, caused her to abandon the case.

It is to be regretted that medical men are so free to talk about cases of which they know nothing—

so free to mention their own successes in similar cases—so free to state what would have been the result had another course been pursued.

Had the butcher stood fire, there would have been no action against anyone else; but when both butcher and market company failed the plaintiff, then somebody else must be found that would not run away. The physician had then to suffer the annoyance of a suit, which, as in this case, though resulting in his favor, has always an annoying and even damaging effect.

#### DR. RHOADS'S METHOD OF LENGTHENING TENDONS, NERVE-TRUNKS, AND BONES.

It has often happened that a discovery once made has been re-made by another, independently and at a later date. The classic example of this is the oft-quoted instance of DARWIN and WALLACE wholly unknown to each other, working out the same great theory of natural selection. In surgical procedures another illustration of the same fact has lately come to our notice. About three years ago Dr. J. NEELY RHOADS, of Philadelphia, hit upon the plan of lengthening contracted tendons by cutting transversely half through the tendon, then longitudinally to any desired extent, and finally finishing the division by cutting through the remaining half of the tendon on the side opposite that on which the original transverse incision was made, and at a point longitudinally removed from it. The desired lengthening of the tendon could thus be accurately determined and limited by allowing the severed longitudinal halves to slip on each other so far as wished, and these could then by sutures be fixed in position until healing took place. DR. RHOADS was prevented from performing this operation three years ago by his patient being suddenly seized with typhoid fever, and dying. The ingenious plan was explained to a number of surgeons at the time. DR. O. H. ALLIS at once adopted it as a commendable operative procedure, advised it to his classes at the Jefferson Medical College, and has a number of times successfully performed it.

Without knowledge of the above facts, on November 29, 1890, PROFESSOR W. W. KEEN, acting upon the suggestion of DR. WEIR MITCHELL, carried out the operation in a case of post-hemiplegic contraction of the flexors of the fingers.

The original plan of DR. RHOADS was not to limit the method to tenotomies, but he recommended, and still suggests, that it would be of equal service

in lengthening nerve-trunks, and *especially* in lengthening bones, when, for instance, one leg is shorter than its fellow.

The method is so ingenious and of such possible usefulness that we desire to call especial attention to it, as also to do justice to the original discoverer.

It may be worth remarking that this method of operation may possibly be of service in strabismus operations, and would be a more accurate and a preferable method of performing "graduated tenotomy" of the external ocular muscles, if "graduated tenotomy" have any usefulness whatever.

When only a slight amount of lengthening is desired, the following modification of the method was also suggested by DR. RHOADS: Transverse incisions are made half way through and on opposite sides of the tendon, but not exactly opposite each other, leaving without complete division certain longitudinal fibers in the center to slip on each other, and thus gaining a slight addition to the entire length of the tendon.

## CORRESPONDENCE.

### CINCINNATI.

*Advertising in the Newspapers; Quacks and Quackery; Prescribing Druggists; the Hospital Abuse; Diploma-mills; Cranks.*

SELDOM does a ripple of excitement disturb the tranquillity of the staid old medical profession of Cincinnati. Everything goes as it comes, and little notice is taken of passing events—except by the daily papers. In this matter we are unfortunately becoming quite metropolitan. Few important surgical operations escape full description in the newspapers, and many quite trifling affairs occupy more space in their description than would be required to cover their *locus in quo*. The older men are displayed in the operations which they perform, and the young men who have not the operations appear in lengthy interviews upon diseases that, on occasion, they are eminently qualified to treat. Unfortunately, again, men worthy of emulation have been thus victimized by the press. One of our leading surgeons who positively and persistently refused to permit a reporter to witness an operation, and has always pursued this course, was maliciously and meanly attacked by one of those pests of journalism—a cheap evening paper.

One newspaper undertakes to tell the medical profession why they should advertise as do the "quacks." Well, it generally requires a lifetime for the average newspaper reporter—and the editor, too, if proprietary interests are concerned—to learn the distinction between an honest, humane physician and the blood-thirsty abortionist who so materially aids the worthy cause of debilitated journalism by cash contributions for squares and editorial comment. Hence the profession aforesaid cannot wonder at disinterested advice coming from such sources.



Owing to the ridiculously lax laws for the regulation of the practice of medicine in Ohio, this city has become the refuge—from adjoining States—of the “irregulars” of every description, and our profession complacently watches the sport. Quack follows quack, each remaining until his name and methods become familiar; then he silently steals away, or moves to another part of the city and begins business under another name. It is not probable that any effective legislation could be secured under present management. The retail druggists are far ahead of us in this regard. They not only regulate themselves, but dictate to the wholesale dealers, and would gladly assume the management of the entire medical profession of America. An effort was made a few months ago to render it unlawful for a physician to dispense his own remedies. Yet the vast majority of Cincinnati druggists prescribe indiscriminately and boldly. Quite a number of them also prepare and advertise their proprietary remedies—especially their sure cures for venereal diseases.

Fully 2000 persons are treated daily, free of charge, in our hospitals and free dispensaries. Yet of all this clinical richness, less than a tenth is in any manner utilized for the good of humanity, if we except that small but important part of humanity directly connected with the institutions referred to. There are still a few practitioners who have not become identified with hospitals or dispensaries, hence it is difficult to predict the future of clinical medicine; but to a casual observer it appears that we have a surfeit of medical charity.

Diploma-mills are just now attracting attention. The proverbial disagreement between knaves revealed at least one source of bogus diplomas, but it is doubtful whether any real good will come from the exposure. The title of the mythical institution was the Medical University of Ohio. Under this dignified name it holds a charter from the State. Proceedings are now pending to revoke the charter; but this measure will probably result in greater secrecy or a change of name. No punishment short of imprisonment will arrest the operations of these swindlers.

We have other chartered institutions whose standing is questioned. The American Eclectic College is not recognized by the Illinois State Board of Health. The College of Vitapathy is an institution which licenses its graduates to practice medicine, solemnize marriage, and otherwise monopolize the rights of the learned professions. Christian scientists—the so-called metaphysicians—have their victims, and there is an anomalous sect whose goddess is a woman alleged to impersonate the Saviour. She receives money and prayers, and cures by the laying-on of hands. Other concerns are believed to exist that either publish or act as agents for bogus diplomas, but they are fairly secure under the charters that they hold. Wisely did Plautus exclaim: “Little do you know what a gloriously uncertain thing the law is.”

#### THE TRANSMISSION FROM PERSON TO PERSON OF DERMATITIS DUE TO RHUS TOXICODENDRON.

To the Editor of THE MEDICAL NEWS,

SIR: For many years I was unaffected by the rhus poison, and assisted folks to rid their gardens of that

pest by pulling the vine up root and branch, but in 1880 I was infected by the *rhhus radicans* whilst clearing out my cemetery lot. The points I desire to note are these:

1. After leaving the cemetery, on my way home, having washed my hands thoroughly, I dressed the arm of a lady having a Colles fracture, and two days thereafter the eruption appeared on my arms and hands. The next day I saw the patient, and she had the rash out fully. A gynecological case seen on the day of my inoculation showed the same effect three days afterward, yet neither of these women could have gotten the trouble other than through myself.

2. Friction of the skin through the clothing at points far from the affected localities developed the rash soon thereafter, showing the disorder to be systemic as well as local. This I repeatedly found true.

3. Treatment prior to the eruption showing itself in those known to have been exposed does not appear to delay or prevent the attack.

4. I have found freshly home-made lime-water the best local application, and fluid extract of jaborandi and iron the preferable internal remedies. The jaborandi I consider a specific in this trouble.

In my own case, as a result of innumerable experiments, I found galvanism the best agent for relieving the excessive itching, but very great care must, of course, be taken in applying electrodes, by thorough washing and the use of absorbent cotton (to be thrown away) to prevent transfer to other victims.

Of all the *anacardiaceæ*, the *rhhus pumilum* is the worst in its effect as a poison; the *rhhus radicans* is the next, and the *rhhus toxicodendron* the mildest, the *rhhus venenata* being so infrequent a toxic agent as to merit little notice. No matter how severe the infection about the face, I never knew the eye to be injured, even when the lids were swollen to an immense size.

I called attention to some of these facts in a short paper in the *Philadelphia Medical Times*, in September, 1880.

Very truly yours,

WM. R. D. BLACKWOOD, M.D.

246 NORTH TWENTIETH STREET.

[We have received quite a number of letters from practitioners describing numerous instances of the transmission from person to person of the poison in question, but as the cases are mostly repetitions of the fact, with slightly varying circumstances, it is not thought necessary to publish a number of the letters. THE MEDICAL NEWS, however, would express its recognition of the courtesies of its correspondents. Dr. Cantrell's report has served to bring out and emphasize a new or somewhat unknown clinical fact of considerable importance.—ED.]

#### WASHINGTON AS A MEETING-PLACE.

To the Editor of THE MEDICAL NEWS,

SIR: As a Kentuckian, I am supposed to carry on my journey a corkscrew and such other agencies and antidotes as shall best serve to protect me against the dangerous effects of water-drinking. As a Southerner I am presumably a semi-salamander, while my hot-bread-three-times-a-day dietetics (old Virginny style) will, I am sure, shock the esthetic table-habits of the Northern-bred. Since coming home from the Congress, sick, I

have read everything you have published in regard to the supposed cause or causes of the diarrhea that so many of us had. I am surprised at the opinion that the fault lay in the food. Men who revel in a high-game club diet and the like at home, went down under plain cooking there, while, irrespective of instances, it may be suggested to those who seem to have forgotten, that if bacteriology teaches anything, it is the efficacy of cooking as a sterilizing procedure. The afternoon of the second day I walked with several others from the Grand Army Hall to the Shoreham. We were hardly able, from prostration and a sense of suffocation, to make the final diagonal crossing at the hotel-corner. On interrogating the thermometer in the drug-store, it was found to register but a paltry 86°; this to one accustomed to live and labor in a summer atmosphere of 98° seemed inexplicable, but a question promptly answered by the single word *humidity* cleared the matter at once. In my opinion, humid, hot air from the Potomac flats, bearing disease-germs in its relaxing and prostrating blasts, despite studied abstemiousness on the one hand or vinous inclinations on the other, seems to have been the cause of the trouble. Speaking of eating and drinking at the Congress, Dr. Battey Tuke said to me: "I have attended all of the great Congresses and Associations of the world, and I have never seen so little junketing and so much work. I have learned more here than at any meeting I have ever attended."

E. R. PALMER.

LOUISVILLE, KY.

#### "THE PROTECTIVE" IN ANTISEPTIC DRESSINGS.

To the Editor of THE MEDICAL NEWS,

SIR: Dr. Benjamin's estimate of the value of the protective in wound-dressings, published in THE MEDICAL NEWS, October 31st, was interesting.

By those who favor its use it is said that this portion of the dressing assists, through its adhesive quality, in keeping the fresh edges of the wound approximated; and that by the same quality, when thoroughly sterilized, it excludes germs that necessarily persist in the deeper portion of the surrounding field from finding an entrance to the wound itself.

That such a result is obtained is very questionable, and that the protective does shut in the slight, unavoidable exudate and furnish an excellent culture-medium is equally unquestionable.

I am convinced that some form of protective is useful in addition to the ordinary dry, antiseptic, absorbent dressing, and for some years I have employed one that is familiar to surgeons in this vicinity as well as to others of your readers, I presume.

A single narrow strip of gauze—bichloride, iodoform, or what you please—is laid over the incision, giving a border of half an inch about the cut and stitches; over this is laid a thin strip of sterilized, absorbent cotton, with its border, in turn, one inch outside of the border of the gauze. The edges of the cotton are thoroughly pasted down with contractile collodion, the middle being left dry for the escape of exudate. By this simple contrivance the first purpose of the more familiar protective is admirably served—that is, the wound edges are well supported. Whatever virtue there may be in the tissue

protective for excluding germs is certainly attained by the collodion dressing, with the advantage that the medium about the wound is less rich in fresh exudate.

The outside dressing of gauze and cotton is applied in the usual manner. Yours,

JAMES G. MUMFORD, M.D.

197 BEACON STREET, BOSTON.

#### HYPODERMATIC INJECTIONS IN DIPHTHERIA.

To the Editor of THE MEDICAL NEWS,

SIR: THE MEDICAL NEWS of some weeks back gave a report of Professor Seibert's treatment of diphtheria by injections of aqua chlori beneath the diphtheritic membrane. Some description was given of the peculiar syringe used.

I wish to report a use I have made, with considerable success, of the Seibert syringe, to wit: The employment of this syringe for the injection of strychninæ sulphas into the pharyngeal muscles in post-diphtheritic paralysis. Ten minims of a one-grain-to-the-ounce aqueous solution were injected daily.

The hypodermatic use of strychnine in this form of paralysis is, of course, a common measure; but the peculiar adaptability of the *Seibert syringe* for this purpose, and my own experience with it, prompt me to send this communication. Respectfully,

WM. S. BARKER, M.D.

ST. LOUIS, MO.

#### TOPICAL APPLICATIONS IN DIPHTHERIA.

To the Editor of THE MEDICAL NEWS,

SIR: I have found the following to be an efficient application in the treatment of diphtheria. It can be employed in all stages of the disease, without danger to the patient. It should be applied often and thoroughly, by means of a brush or cotton swab, until the diseased membrane entirely disappears. In connection with this remedy I give as much brandy as the patient will bear, and such other remedies as may be indicated.

R.—Acidi borici . . . . .	3j.
Acidi lactici . . . . .	f 3j.
Glycerini . . . . .	f 3jss.
Aquæ dest. . . . .	f 3ijss.
Liq. ferri subsulph. . . . .	f 3jss.—M.

This solution may be used in full strength or diluted with water, as each case may require.

Yours truly, GEORGE W. PECK, M.D.

OMAHA, NEB.

#### IDIOSYNCRASY.

To the Editor of THE MEDICAL NEWS,

SIR: An editorial in THE MEDICAL NEWS of November 14th, entitled "Idiosyncrasy," recalls to my mind an interesting case. In the spring of 1890 a young lady, after eating a fried codfish-cake, was seized with cholera morbus, extreme dyspnea, and an intolerable itching of the whole cutaneous surface. Some six hours afterward a general urticaria developed. The symptoms were intense for two days and mild for three days more. The mother said that some years before, the daughter, during convalescence from one of the diseases of childhood, had experienced a similar attack, but of milder degree,

after eating codfish-steak. Three weeks after the attack in which I saw the girl the mere odor of cooking fish induced a mild recurrence of the attack. Three months later she again became ill from smelling fish, since which time (now over a year) she has had no similar trouble.

WILLOUGHBY I. WOOD.

BROOKLYN, N. Y., Nov. 16, 1891.

## REVIEWS.

**A MANUAL OF HYPODERMATIC MEDICATION: THE TREATMENT OF DISEASE BY THE HYPODERMATIC OR SUBCUTANEOUS METHOD.** By ROBERTS BARTHOLOW, A.M., M.D., LL.D., Emeritus Professor of Materia Medica, General Therapeutics, and Hygiene in the Jefferson Medical College of Philadelphia; Honorary Fellow of the Royal Society of Edinburgh; Honorary Member of the Société Médico-Pratique de Paris; Fellow of the College of Physicians of Philadelphia, etc.; author of a Treatise on the Practice of Medicine; of a Treatise on Materia Medica and Therapeutics; of a Manual of Medical Electricity, etc. Fifth edition, enlarged and revised. Pp. 529. Philadelphia: J. B. Lippincott Company, 1891.

THE many pupils of Professor Bartholow, that have been guided by his teachings through the difficulties of medical practice will be gratified to learn that, since laying aside the cares of professorial work, he has been devoting his energies to a careful revision of his various works, so as to give to the profession the results of his careful scientific observations, his mature reflections and judgments. The present edition, the fifth, of his work upon hypodermatic medication is the first of the series to appear. In its enlarged and revised form it will be cordially welcomed by those that are familiar with the methods of hypodermatic treatment advocated in previous editions, since it contains a complete but well-digested summary of the existing state of knowledge in this department of therapeutics. There is no similar work that covers the same ground so thoroughly or so satisfactorily.

As stated in the preface, the book has not only been revised, but has also been enlarged by the addition of nearly two hundred pages of new material. All of the modern drugs that have been employed hypodermatically have received more or less consideration in proportion as they have been found therapeutically valuable by thoughtful clinicians. In recasting this edition, Professor Bartholow has arranged the remedies in accordance with the scientific classification adopted by him in his work on materia medica and therapeutics, and which is based upon their physiological actions; while objections may be urged against this classification, it is, nevertheless, on the whole, the best that has as yet been suggested, and if carefully studied will afford a clear insight into the true actions of drugs, their antagonisms and therapeutic uses.

Some thirty pages are devoted to a sketch of the history of hypodermatic medication; to a consideration of the methods employed in the administration of a remedy, to its local and systemic effects, to the characters of syringes and needles—small details in one sense, and yet upon their due appreciation depends the success largely of this

form of treatment. Under each heading will be found the best methods of preparing drugs, and the various formulæ which have been found most efficacious, not only by the author but by clinicians throughout the world. The physiological effects which follow the injection are stated in a clear, concise, and thorough manner. The physiological antagonisms of drugs, a subject that Professor Bartholow has particularly elucidated, is explicitly pointed out. The therapeutical indications for the employment of the remedies by the needle are numerous and their value attested by the author's own vast experience and by references to the published experiences of other thoughtful observers.

As an illustration of the completeness of this edition, it may be stated that 20 pages are devoted to a consideration of mercury and its salts; 17 to iodine; 22 to pilocarpine; 13 to antipyrin; 71 to morphine; 73 to atropine and its combinations with morphine, physostigmine, and pilocarpine; 10 to hyoscyamine and hyoscyne. It is unnecessary to mention the space devoted to the remainder of the drugs; suffice it to say that each receives careful consideration. Altogether it is the best work in the English language pertaining to this subject,\* and one that should be in the possession of every physician who wishes to be abreast of modern therapeutics.

**ARTIFICIAL ANESTHESIA AND ANESTHETICS.** By DE FOREST WILLARD, A.M., M.D., PH.D., Clinical Professor of Orthopedic Surgery in the University of Pennsylvania, etc., and LEWIS H. ADLER, JR., M.D., Instructor in Rectal Diseases, Philadelphia Polyclinic and College for Graduates in Medicine. 8vo., pp. vi, 144. The Physician's Leisure Library. Detroit: George S. Davis, 1891.

THIS little volume is a creditable *résumé* of our knowledge on the subjects with which it sets out to deal. Anesthesia and anesthetics are considered from all points of view and in all their various phases in a clear, concise, and orderly manner. Not a little value attaches to the work from the fact that the conclusions reached are based upon a not inconsiderable experience on the part of one or both of the authors. As is natural, those methods are commended as the best with which the operator has had the largest experience. The skill acquired by repeated manipulation makes the more familiar procedure the safer. The fact implied in these statements is exemplified in the selection of either ether or chloroform as the anesthetic. Of ether it is said that "it is the safest known agent for the production of prolonged narcosis." The conclusion of the Hyderabad Commission that "chloroform may be given in any case requiring an operation with perfect ease and absolute safety, so as to do good without the risk of evil," is held to be "a somewhat sweeping assertion." The fact that we wish to emphasize is that either chloroform or ether is comparatively safe as an anesthetic in the hands of one who is skilled in the use of the one or the other, and that the chances are that the surgeon will use that with which, by accident or association, he has become most familiar.

The book is well printed, the typographical errors few and unimportant. It can be profitably read by all that are interested in the subjects of anesthesia and anesthetics.



**MINOR SURGERY AND BANDAGING, INCLUDING THE TREATMENT OF FRACTURES AND DISLOCATIONS, TRACHEOTOMY, INTUBATION OF THE LARYNX, LIGATION OF ARTERIES AND AMPUTATIONS.** By HENRY R. WHARTON, M.D. Philadelphia: Lea Brothers & Co., 1891.

DR. WHARTON has written a book especially designed for students and younger practitioners, superior in many respects to others on this subject. The portions of it devoted to bandaging and fracture-dressing are particularly good. Full and accurate verbal descriptions of the mode of applying all the important bandages, and of the best modern methods of treating and dressing fractures and dislocations, are supplemented and rendered still more valuable by a number of excellent illustrations, most of them new. These have been photographed from life, and, with the improved methods now employed for reproducing such figures in a form suitable for book publication, they combine the advantages of clearness of outline and accuracy in portraying the various turns of the bandages they represent. Thus the methods of application of the various dressings are rendered more easy of comprehension than by verbal description.

The part of the work devoted to a description of the different substances and materials used in antiseptic dressings and operations and the mode of their preparation seems also excellent.

Among the descriptions of the various procedures employed in minor surgery, we hope, in a second edition, to see more special reference made to the treatment of felon, onychia, etc. A few words upon the drawing of teeth might also find a useful place in the book.

A complete index of fourteen pages, containing over 700 terms, brings the size of the book up to 497 pages.

**A MANUAL OF PRACTICAL OBSTETRICS.** By EDWARD P. DAVIS, A.M., M.D., Clinical Lecturer on Obstetrics in the Jefferson Medical College; Professor of Obstetrics and Diseases of Children in the Philadelphia Polyclinic; Visiting Obstetrician to the Philadelphia Hospital; Physician to the Children's Department of the Howard Hospital; Member of the American Gynecological Association. With one hundred and forty illustrations, two of which are colored. 8vo., pp. 298. Philadelphia: P. Blakiston, Son & Co., 1891.

BOOKS upon obstetrics have so largely multiplied that one may reasonably doubt if any immediate necessity existed for additions to the number. Good books, however, are always welcome, and will be given cordial reception. In this class belongs the manual of Dr. Davis, of which it is to be said that, though concise, it is clear in expression and accurate in statement. Within narrow limits a great range of subjects has been discussed with admirable skill and precision. The text makes easy and agreeable reading. The utility of the work is greatly enhanced by a large number of excellent illustrations. The descriptions of some of the plates might advantageously have been inserted. By an apparent inadvertence the list of illustrations is not paged; it would be well if the list of plates were also paged. The book may be cordially recommended to those who do not desire to use the larger and more voluminous works on obstetrics.

**HANDBOOK OF MATERIA MEDICA, PHARMACY, AND THERAPEUTICS, INCLUDING THE PHYSIOLOGICAL ACTION OF DRUGS, THE SPECIAL THERAPEUTICS OF DISEASE, OFFICIAL AND PRACTICAL PHARMACY, AND MINUTE DIRECTIONS FOR PRESCRIPTION-WRITING.** By SAMUEL O. L. POTTER, A.M., M.D. (Jefferson), M.R.C.P. (Lond.), Professor of the Theory and Practice of Medicine in the Cooper Medical College of San Francisco, etc. Third edition, revised. Philadelphia: P. Blakiston, Son & Co., 1891.

THIS, the third revised edition of Dr. Potter's most praiseworthy work, is a compendious compilation of the subjects with which it has to deal, arranged in a convenient manner and provided with a complete index that makes reference easy. The articles of the *Materia Medica* are arranged alphabetically, the pharmacology, physiological action, and therapeutical application of each being concisely given. A section is devoted to pharmacy and to the art of writing prescriptions. The section on Special Therapeutics comprises a list of clinical conditions alphabetically arranged, with the remedies recommended for each. The appendix contains a good deal of useful information on a wide range of subjects.

The work should prove useful as an aid in the study of a subject that is at best not easily comprehended.

**ESSENTIALS OF BACTERIOLOGY.** By M. V. BALL, M.D. Philadelphia: W. B. Saunders, 1891.

WE can cheerfully recommend this little volume as containing an excellent condensation of recent bacteriological teachings, presented in a lucid style. The faults of the work are minor, and pertain principally to the arrangement. One objection we feel we should note: The method of drying cover-glass preparations. Thorough air-drying is of such importance in the proper homogenization of the matter spread on the glass, that the neglect of it causes more failures in staining than any other error, and it is bad advice to suggest drying over a Bunsen flame, even though the student be cautioned against excessive heat.

The amount of material condensed in this little book is so great and so accurate are the formulæ and methods, that it will doubtless be found useful as a laboratory hand-book.

**PHYSICIANS' READY REFERENCE ACCOUNT BOOK.** Arranged by GIDEON C. SEGUR, M.D. Pp. 300. Hartford, Conn.: The Plimpton Manufacturing Co., 1891.

THIS book is admirably adapted to take the place both of the visiting list and the cumbersome ledger of the physician. A single line on any page is sufficient to convey the desired information as to charges, credits, and balances for one month; charges and credits being entered in black and red ink respectively. Space is economized, as it is possible, if desired, to enter several accounts on the same pages.

The last fifty pages are devoted to short accounts, an extra column being here added for previous charges. In these accounts reference is facilitated by indexing the page and line. The book is, in short, as its name implies, a ready reference account book, the plan of keeping the accounts being of such a simple character

that a knowledge of bookkeeping is unnecessary. It is of convenient size and bound in half morocco. The price, \$3.50, is moderate.

**OBSTETRICAL NURSING.** A Handbook of Obstetrical Nursing for Nurses, Students, and Mothers. (Comprising the Course of Instruction in Obstetrical Nursing given to the Pupils of the Training School for Nurses connected with the Woman's Hospital of Philadelphia.) By ANNA M. FULLERTON, M.D., Demonstrator of Obstetrics in the Woman's College of Pennsylvania; Physician-in-Charge and Obstetrician and Gynecologist to the Woman's Hospital, etc. Second edition, revised. Philadelphia: P. Blakiston, Son & Co., 1891.

THE simplicity of style and direct method of teaching are sufficient in themselves to recommend this little book. The matter contained in it necessarily presents little that is new, and the arrangement of the book differs in no respect from that of similar handbooks.

The chapter, however, on the Care of the Newborn Infant is clearly, as the writer states in her preface, "up to the present standard of our knowledge." This chapter is carefully arranged, and the tables descriptive of the analysis of human milk, the rules of feeding, and the various formulæ for the preparation of artificial food are of great value for their clearness and the opportunity they offer for comparison.

In the preface to the second edition the writer cites the usefulness to the physician, the nurse, and the patient, of her work. In attempting to meet such varied wants she has undertaken a serious task, but a careful study of the succeeding pages will convince the reader of the success which has attended her efforts in this respect.

The careful training and the unusual advantages for observation in this branch, and the natural insight into the requisites of good nursing on the part of the writer, contribute to make this the standard text-book on this subject.

## NEWS ITEMS.

**Insanity, Blindness, and Deaf-Mutism in Vienna.**—At the end of 1890 a census was taken of the population of the Austrian capital, which showed that it contained 1,380,917 inhabitants, being an increase of rather more than 23 per cent. as compared with the enumeration made ten years before. The proportion of the sexes was 51.63 per cent. of females to 48.37 per cent. of males. The number of persons suffering from mental or physical infirmity was 3964, of whom 983, or 24.8 per cent., were blind; 980, or 24.7 per cent., were deaf and dumb; 1627, or 41.04 per cent., were idiots or insane; and 374, or 9.44 per cent., were cretins. Of the whole number, 53.13 per cent. were males, and 46.87 per cent. were females. The excess of males as compared with females, however, holds good only as regards cases of deaf-mutism, insanity, and idiocy; the cases of blindness are equally distributed between the sexes, and as regards cretinism, the fair sex leads easily, the respective percentages being 39.3 males to 60.7 females. On comparing these figures with those of the census of 1880, it

will be seen that while blindness has diminished by nearly 10 per cent., and deaf-mutism has remained stationary, insanity and cretinism have increased by 32 per cent. This increase is greater in the female sex than in the male, in the proportion of 43.02 to 23.2 per cent. Of the 983 blind persons, only 21, or 6 per cent., were born blind; the causes of the condition are said to have been blennorrhœa neonatorum (in 14 cases), small-pox (in 11), other affections (in 295), and injury (in 17). Of 381 deaf-mutes not inmates of public institutions, 127, or 33.3 per cent., became deaf and dumb after birth. Of the cretins, 63.4 per cent. are between ten and thirty years of age, and 31 per cent. can do ordinary household work.—*British Medical Journal*, August 29, 1891.

**Mortality According to Occupation.**—At the recent Congress of Hygiene and Demography, Mr. Ogle presented statistics as to the comparative mortality among those between twenty-five and sixty-five years old engaged in the various occupations in England. The death-rate among clergymen being the least, this was taken as a standard of comparison. The following table presents the comparative mortality:

Clergymen . . . . .	100	Wool-workers . . . . .	186
Gardeners . . . . .	108	Armors . . . . .	186
Farmers . . . . .	114	Tailors . . . . .	189
Husbandmen . . . . .	126	Hatters . . . . .	192
Papermakers . . . . .	129	Printers . . . . .	193
Grocers . . . . .	139	Cotton-workers . . . . .	196
Fishermen . . . . .	143	Clerks . . . . .	199
Cabinetmakers . . . . .	148	Physicians . . . . .	202
Lawyers . . . . .	152	Quarrymen . . . . .	202
Brushmakers . . . . .	152	Bookbinders . . . . .	210
Mechanics . . . . .	155	Butchers . . . . .	211
Tradesmen . . . . .	158	Glassmakers . . . . .	214
Woollen-drapers . . . . .	159	Plumbers, painters, etc., . . . . .	216
Miners . . . . .	160	Cutlers . . . . .	229
Shoemakers . . . . .	166	Brewers . . . . .	245
Commercial travellers . . . . .	171	Omnibus-drivers . . . . .	267
Bakers . . . . .	172	Wine-merchants . . . . .	274
Millers . . . . .	172	Bass singers . . . . .	300
Upholsterers . . . . .	173	Potters . . . . .	314
Masons . . . . .	174	Miners . . . . .	331
Smiths . . . . .	175	Hotel-waiters . . . . .	397
Laborers . . . . .	185		

**Tuberculosis in German Prisons.**—CORNET (*Zeitschrift für Hygiene*, x, 1891) has estimated that, in the past fifteen years, 45.82 per cent. of all deaths among males, and 49.33 per cent. among females, in prisons, were due to tuberculous disease. Below the age of twenty there was no material difference between the death-rate from tuberculosis among prisoners and that among the ordinary population; but between twenty and forty the death-rate was five times as high among prisoners as among the general population. Some of this excess is attributable to insufficient exercise and ventilation, and to want of variety in food. Another cause lies in the probable infection of cells by tubercle bacilli, insufficient care in disinfection being observed. In a considerable proportion of cases of tuberculosis in prisons the disease had existed prior to the incarceration, as is shown by the number of deaths from tuberculosis during the first few months of imprisonment.—*British Medical Journal*, October 24, 1891.

**Vital Statistics**—According to the *Financial and Insurance Chronicle*, the yearly number of deaths throughout the world may be estimated as thirty-three million. Upon this estimate, there would be 90,410 deaths per day, 3767 per hour, and 62 per minute. The average duration of life is computed as thirty-eight years. A fourth of mankind dies before seven; a half before or at seventeen. One person in ten thousand lives to be a hundred years old; one in five hundred to be ninety; one in one hundred to be sixty. The life of the married is longer than that of the unmarried. Of a thousand persons that have lived to be ninety years old, forty-three were engaged in religious or political pursuits; forty in agricultural pursuits; thirty-three were artisans; thirty-two soldiers; twenty-nine lawyers or engineers; twenty-seven professors, and twenty-four physicians.

**The Philadelphia Polyclinic and College for Graduates in Medicine** has arranged a course of evening lectures, to be given by the members of the teaching corps on Tuesday and Friday evenings of each week, at eight o'clock, in the new Polyclinic Hospital, Lombard Street, above Eighteenth Street: Nov. 24, Dr. Edward Jackson, The Shadow Test; Nov. 27, Dr. B. Alexander Randall, Ear Diseases in General Practice; Dec. 1, Dr. S. D. Risley, The Diseases of the Choroidal Tract; Dec. 4, Dr. John B. Deaver, The Operative Treatment of Head Injuries; Dec. 8, Dr. Henry Leffmann, Recognition of Albumose and Peptone in Urine; Dec. 11, Dr. Edward P. Davis, The Use of the Forceps; Dec. 15, Dr. Henry Leffmann, Determination of Sugar and Urea in Urine; Dec. 18, Dr. S. D. Risley, The Diseases of the Choroidal Tract; Dec. 22, Dr. John B. Roberts, Fractures of the Elbow; Jan. 5, Dr. J. Henry C. Simes, Syphilis; Jan. 8, Dr. Lewis H. Adler, Jr., The Physical Exploration of the Rectum; Jan. 12, Dr. Arthur Van Harlingen, The Contagious Diseases of the Skin—Their Diagnosis and Treatment; Jan. 15, Dr. John B. Deaver, The Radical Cure of Hernia—Umbilical, Inguinal, and Femoral; Jan. 19, Dr. J. Henry C. Simes, Syphilis; Jan. 22, Dr. H. Augustus Wilson, The Mechanism of the Normal Foot with Reference to the Correction of Deformities; Jan. 26, Dr. Arthur Van Harlingen, The Antiseptic Treatment of Skin Diseases; Jan. 29, Dr. Lewis H. Adler, Jr., Congenital Malformations of the Rectum and Anus; Feb. 2, Dr. E. P. Davis, The Treatment of Delayed Labor.

**Department of Midwifery of the New York Post-Graduate Medical School**.—Mrs. C. P. Huntington has given the directors of the Post-Graduate Medical School \$2000, a sum sufficient to defray the expenses of the midwifery department for one year. Professor von Ramdohr will have charge of the department, at No. 543 East Thirtieth Street, where instruction in obstetrics will be given to graduates in medicine only.

**Nothnagel**, of Vienna, recently celebrated his fiftieth birthday. A number of his pupils, including Rosenbach, v. Jaksch, Bamberger, and Kogerer, presented him with an album containing their photographs.

**Professor v. Hippel** was recently awarded the Welz Prize for his work on *A New Method of Transplantation of the Cornea*.

**New York Pasteur Institute**.—During the first six months of the second year of its existence (February 18, 1891 to August 18, 1891), 415 persons, bitten by dogs, cats, and other animals, applied at the New York Pasteur Institute for treatment.

In the case of 345 of these persons, it was demonstrated that the animals attacking them were not mad. Consequently the patients were sent back after having had their wounds attended to during the proper length of time. In 70 cases the anti-hydrophobia treatment was applied, hydrophobia of the animals inflicting bites having been evidenced clinically, or by inoculation at the laboratory, and in many cases by the death of some other persons or animals bitten by the same dogs.

Indigents have been treated free of charge.

In but one case did death occur after the treatment had been carried out.

**The Vision of Sailors**.—The city of Lübeck has adopted the practice of the city of Hamburg, of systematically testing the eyesight of sailors, especially as regards color-vision.

**The German Dermatological Association** will hold its next congress in September, 1892, at Vienna, under the chairmanship of Kaposi, in conjunction with the Second International Dermatological Congress.

**Professor S. Exner** has been made Professor of Physiology in the University of Vienna.

**Dr. Julius Dreschfeld**, who for ten years has been Professor of Pathology in Owens College, London, has been nominated for the Professorship of Medicine, to succeed Dr. Morgan, who has resigned.

**Professor Gustav Edlerson** has resigned the chair of Internal Medicine in the University of Kiel, to take up his residence at Hamburg.

**Dr. J. West Roosevelt, M.D.**, has been elected Professor of Clinical Medicine in the New York Post-Graduate Medical School and Hospital.

**Professor R. v. Mosetig** recently assumed direction of the surgical department of the Vienna General Hospital.

#### OFFICIAL LIST OF CHANGES IN THE STATIONS AND DUTIES OF THE MEDICAL CORPS OF THE U. S. NAVY FOR THE WEEK ENDING NOVEMBER 21, 1891.

**WOOLVERTON, THEORON, Medical Inspector**.—Placed on the Retired List, November 13, 1891.

**BRYANT, P. H., Assistant Surgeon**.—Detached from Coast-survey Steamer "Gedney," and wait orders.

**JONES, W. H., Surgeon**.—Ordered to examination preliminary to promotion.

COMMUNICATIONS are invited from all parts of the world. Original articles contributed exclusively to THE MEDICAL NEWS will upon publication be liberally paid for, or 250 reprints will be furnished instead of payment, provided that the request for reprints be noted by the author at the top of the manuscript. When necessary to elucidate the text, illustrations will be provided without cost to the author.

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